



OpenShift Container Platform 4.20

Monitoring APIs

Reference guide for monitoring APIs

OpenShift Container Platform 4.20 Monitoring APIs

Reference guide for monitoring APIs

Legal Notice

Copyright © 2025 Red Hat, Inc.

The text of and illustrations in this document are licensed by Red Hat under a Creative Commons Attribution–Share Alike 3.0 Unported license ("CC-BY-SA"). An explanation of CC-BY-SA is available at

<http://creativecommons.org/licenses/by-sa/3.0/>

. In accordance with CC-BY-SA, if you distribute this document or an adaptation of it, you must provide the URL for the original version.

Red Hat, as the licensor of this document, waives the right to enforce, and agrees not to assert, Section 4d of CC-BY-SA to the fullest extent permitted by applicable law.

Red Hat, Red Hat Enterprise Linux, the Shadowman logo, the Red Hat logo, JBoss, OpenShift, Fedora, the Infinity logo, and RHCE are trademarks of Red Hat, Inc., registered in the United States and other countries.

Linux[®] is the registered trademark of Linus Torvalds in the United States and other countries.

Java[®] is a registered trademark of Oracle and/or its affiliates.

XFS[®] is a trademark of Silicon Graphics International Corp. or its subsidiaries in the United States and/or other countries.

MySQL[®] is a registered trademark of MySQL AB in the United States, the European Union and other countries.

Node.js[®] is an official trademark of Joyent. Red Hat is not formally related to or endorsed by the official Joyent Node.js open source or commercial project.

The OpenStack[®] Word Mark and OpenStack logo are either registered trademarks/service marks or trademarks/service marks of the OpenStack Foundation, in the United States and other countries and are used with the OpenStack Foundation's permission. We are not affiliated with, endorsed or sponsored by the OpenStack Foundation, or the OpenStack community.

All other trademarks are the property of their respective owners.

Abstract

This document describes the OpenShift Container Platform monitoring API objects and their detailed specifications.

Table of Contents

CHAPTER 1. MONITORING APIS	46
1.1. ALERTMANAGER [MONITORING.COREOS.COM/V1]	46
1.2. ALERTMANAGERCONFIG [MONITORING.COREOS.COM/V1BETA1]	46
1.3. ALERTRELABELCONFIG [MONITORING.OPENSIFT.IO/V1]	46
1.4. ALERTINGRULE [MONITORING.OPENSIFT.IO/V1]	46
1.5. PODMONITOR [MONITORING.COREOS.COM/V1]	47
1.6. PROBE [MONITORING.COREOS.COM/V1]	47
1.7. PROMETHEUS [MONITORING.COREOS.COM/V1]	47
1.8. PROMETHEUSRULE [MONITORING.COREOS.COM/V1]	48
1.9. SERVICEMONITOR [MONITORING.COREOS.COM/V1]	48
1.10. THANOSRULER [MONITORING.COREOS.COM/V1]	48
1.11. NODEMETRICS [METRICS.K8S.IO/V1BETA1]	49
1.12. PODMETRICS [METRICS.K8S.IO/V1BETA1]	49
CHAPTER 2. ALERTMANAGER [MONITORING.COREOS.COM/V1]	50
2.1. SPECIFICATION	50
2.1.1. .spec	51
2.1.2. .spec.additionalArgs	63
2.1.3. .spec.additionalArgs[]	63
2.1.4. .spec.affinity	63
2.1.5. .spec.affinity.nodeAffinity	64
2.1.6. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution	65
2.1.7. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[]	65
2.1.8. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference	66
2.1.9. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchExpress	66
2.1.10. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchExpres:	66
2.1.11. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchFields	67
2.1.12. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchFields[]	67
2.1.13. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution	68
2.1.14. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms	68
2.1.15. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[]	69
2.1.16. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].match	69
2.1.17. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].match	69
2.1.18. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].match	70
2.1.19. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].match	70
2.1.20. .spec.affinity.podAffinity	71
2.1.21. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution	73
2.1.22. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]	73
2.1.23. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm	74
2.1.24. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSele	76
2.1.25. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSele	76
2.1.26. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSele	77

2.1.27. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespa	77
2.1.28. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespa	78
2.1.29. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespa	78
2.1.30. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution	79
2.1.31. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[]	79
2.1.32. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector	81
2.1.33. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExpres	82
2.1.34. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExpres	82
2.1.35. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector	83
2.1.36. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.match	83
2.1.37. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.matchl	84
2.1.38. .spec.affinity.podAntiAffinity	84
2.1.39. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution	86
2.1.40. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[]	86
2.1.41. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm	87
2.1.42. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.label	89
2.1.43. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.label	89
2.1.44. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.label	90
2.1.45. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.nam	90
2.1.46. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.nam	91
2.1.47. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.nam	91
2.1.48. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution	92
2.1.49. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[]	92
2.1.50. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector	94
2.1.51. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExp	95
2.1.52. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExp	95
2.1.53. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector	96
2.1.54. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.ma	96
2.1.55. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.ma	97
2.1.56. .spec.alertmanagerConfigMatcherStrategy	97
2.1.57. .spec.alertmanagerConfigNamespaceSelector	98
2.1.58. .spec.alertmanagerConfigNamespaceSelector.matchExpressions	98
2.1.59. .spec.alertmanagerConfigNamespaceSelector.matchExpressions[]	99
2.1.60. .spec.alertmanagerConfigSelector	99
2.1.61. .spec.alertmanagerConfigSelector.matchExpressions	100
2.1.62. .spec.alertmanagerConfigSelector.matchExpressions[]	100
2.1.63. .spec.alertmanagerConfiguration	101

2.1.64. .spec.alertmanagerConfiguration.global	101
2.1.65. .spec.alertmanagerConfiguration.global.httpConfig	102
2.1.66. .spec.alertmanagerConfiguration.global.httpConfig.authorization	104
2.1.67. .spec.alertmanagerConfiguration.global.httpConfig.authorization.credentials	104
2.1.68. .spec.alertmanagerConfiguration.global.httpConfig.basicAuth	105
2.1.69. .spec.alertmanagerConfiguration.global.httpConfig.basicAuth.password	105
2.1.70. .spec.alertmanagerConfiguration.global.httpConfig.basicAuth.username	106
2.1.71. .spec.alertmanagerConfiguration.global.httpConfig.bearerTokenSecret	107
2.1.72. .spec.alertmanagerConfiguration.global.httpConfig.oauth2	107
2.1.73. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.clientId	109
2.1.74. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.clientId.configMap	109
2.1.75. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.clientId.secret	110
2.1.76. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.clientSecret	110
2.1.77. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.proxyConnectHeader	111
2.1.78. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.proxyConnectHeader{}	111
2.1.79. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.proxyConnectHeader{}	111
2.1.80. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.tlsConfig	112
2.1.81. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.tlsConfig.ca	113
2.1.82. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.tlsConfig.ca.configMap	113
2.1.83. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.tlsConfig.ca.secret	114
2.1.84. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.tlsConfig.cert	114
2.1.85. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.tlsConfig.cert.configMap	115
2.1.86. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.tlsConfig.cert.secret	115
2.1.87. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.tlsConfig.keySecret	116
2.1.88. .spec.alertmanagerConfiguration.global.httpConfig.proxyConnectHeader	117
2.1.89. .spec.alertmanagerConfiguration.global.httpConfig.proxyConnectHeader{}	117
2.1.90. .spec.alertmanagerConfiguration.global.httpConfig.proxyConnectHeader{}	117
2.1.91. .spec.alertmanagerConfiguration.global.httpConfig.tlsConfig	117
2.1.92. .spec.alertmanagerConfiguration.global.httpConfig.tlsConfig.ca	118
2.1.93. .spec.alertmanagerConfiguration.global.httpConfig.tlsConfig.ca.configMap	118
2.1.94. .spec.alertmanagerConfiguration.global.httpConfig.tlsConfig.ca.secret	119
2.1.95. .spec.alertmanagerConfiguration.global.httpConfig.tlsConfig.cert	120
2.1.96. .spec.alertmanagerConfiguration.global.httpConfig.tlsConfig.cert.configMap	120
2.1.97. .spec.alertmanagerConfiguration.global.httpConfig.tlsConfig.cert.secret	121
2.1.98. .spec.alertmanagerConfiguration.global.httpConfig.tlsConfig.keySecret	121
2.1.99. .spec.alertmanagerConfiguration.global.jira	122
2.1.100. .spec.alertmanagerConfiguration.global.opsGenieApiKey	122
2.1.101. .spec.alertmanagerConfiguration.global.opsGenieApiUrl	123
2.1.102. .spec.alertmanagerConfiguration.global.rocketChat	123
2.1.103. .spec.alertmanagerConfiguration.global.rocketChat.token	124
2.1.104. .spec.alertmanagerConfiguration.global.rocketChat.tokenID	125
2.1.105. .spec.alertmanagerConfiguration.global.slackApiUrl	125
2.1.106. .spec.alertmanagerConfiguration.global.smtp	126
2.1.107. .spec.alertmanagerConfiguration.global.smtp.authPassword	127
2.1.108. .spec.alertmanagerConfiguration.global.smtp.authSecret	128
2.1.109. .spec.alertmanagerConfiguration.global.smtp.smartHost	128
2.1.110. .spec.alertmanagerConfiguration.global.smtp.tlsConfig	129
2.1.111. .spec.alertmanagerConfiguration.global.smtp.tlsConfig.ca	129
2.1.112. .spec.alertmanagerConfiguration.global.smtp.tlsConfig.ca.configMap	130
2.1.113. .spec.alertmanagerConfiguration.global.smtp.tlsConfig.ca.secret	130
2.1.114. .spec.alertmanagerConfiguration.global.smtp.tlsConfig.cert	131
2.1.115. .spec.alertmanagerConfiguration.global.smtp.tlsConfig.cert.configMap	131
2.1.116. .spec.alertmanagerConfiguration.global.smtp.tlsConfig.cert.secret	132

2.1.117. .spec.alertmanagerConfiguration.global.smtp.tlsConfig.keySecret	132
2.1.118. .spec.alertmanagerConfiguration.global.telegram	133
2.1.119. .spec.alertmanagerConfiguration.global.victorops	133
2.1.120. .spec.alertmanagerConfiguration.global.victorops.apiKey	134
2.1.121. .spec.alertmanagerConfiguration.global.webex	134
2.1.122. .spec.alertmanagerConfiguration.global.wechat	135
2.1.123. .spec.alertmanagerConfiguration.global.wechat.apiSecret	135
2.1.124. .spec.alertmanagerConfiguration.templates	136
2.1.125. .spec.alertmanagerConfiguration.templates[]	136
2.1.126. .spec.alertmanagerConfiguration.templates[].configMap	136
2.1.127. .spec.alertmanagerConfiguration.templates[].secret	137
2.1.128. .spec.clusterTLS	137
2.1.129. .spec.clusterTLS.client	138
2.1.130. .spec.clusterTLS.client.ca	139
2.1.131. .spec.clusterTLS.client.ca.configMap	139
2.1.132. .spec.clusterTLS.client.ca.secret	140
2.1.133. .spec.clusterTLS.client.cert	140
2.1.134. .spec.clusterTLS.client.cert.configMap	141
2.1.135. .spec.clusterTLS.client.cert.secret	141
2.1.136. .spec.clusterTLS.client.keySecret	142
2.1.137. .spec.clusterTLS.server	142
2.1.138. .spec.clusterTLS.server.cert	145
2.1.139. .spec.clusterTLS.server.cert.configMap	145
2.1.140. .spec.clusterTLS.server.cert.secret	145
2.1.141. .spec.clusterTLS.server.client_ca	146
2.1.142. .spec.clusterTLS.server.client_ca.configMap	146
2.1.143. .spec.clusterTLS.server.client_ca.secret	147
2.1.144. .spec.clusterTLS.server.keySecret	148
2.1.145. .spec.containers	148
2.1.146. .spec.containers[]	149
2.1.147. .spec.containers[].env	156
2.1.148. .spec.containers[].env[]	156
2.1.149. .spec.containers[].env[].valueFrom	157
2.1.150. .spec.containers[].env[].valueFrom.configMapKeyRef	158
2.1.151. .spec.containers[].env[].valueFrom.fieldRef	158
2.1.152. .spec.containers[].env[].valueFrom.resourceFieldRef	159
2.1.153. .spec.containers[].env[].valueFrom.secretKeyRef	159
2.1.154. .spec.containers[].envFrom	160
2.1.155. .spec.containers[].envFrom[]	160
2.1.156. .spec.containers[].envFrom[].configMapRef	161
2.1.157. .spec.containers[].envFrom[].secretRef	161
2.1.158. .spec.containers[].lifecycle	161
2.1.159. .spec.containers[].lifecycle.postStart	163
2.1.160. .spec.containers[].lifecycle.postStart.exec	163
2.1.161. .spec.containers[].lifecycle.postStart.httpGet	164
2.1.162. .spec.containers[].lifecycle.postStart.httpGet.httpHeaders	165
2.1.163. .spec.containers[].lifecycle.postStart.httpGet.httpHeaders[]	165
2.1.164. .spec.containers[].lifecycle.postStart.sleep	165
2.1.165. .spec.containers[].lifecycle.postStart.tcpSocket	166
2.1.166. .spec.containers[].lifecycle.preStop	166
2.1.167. .spec.containers[].lifecycle.preStop.exec	167
2.1.168. .spec.containers[].lifecycle.preStop.httpGet	167
2.1.169. .spec.containers[].lifecycle.preStop.httpGet.httpHeaders	168

2.1.170. .spec.containers[].lifecycle.preStop.httpGet.httpHeaders[]	168
2.1.171. .spec.containers[].lifecycle.preStop.sleep	169
2.1.172. .spec.containers[].lifecycle.preStop.tcpSocket	169
2.1.173. .spec.containers[].livenessProbe	170
2.1.174. .spec.containers[].livenessProbe.exec	171
2.1.175. .spec.containers[].livenessProbe.grpc	172
2.1.176. .spec.containers[].livenessProbe.httpGet	172
2.1.177. .spec.containers[].livenessProbe.httpGet.httpHeaders	173
2.1.178. .spec.containers[].livenessProbe.httpGet.httpHeaders[]	173
2.1.179. .spec.containers[].livenessProbe.tcpSocket	174
2.1.180. .spec.containers[].ports	174
2.1.181. .spec.containers[].ports[]	174
2.1.182. .spec.containers[].readinessProbe	175
2.1.183. .spec.containers[].readinessProbe.exec	177
2.1.184. .spec.containers[].readinessProbe.grpc	178
2.1.185. .spec.containers[].readinessProbe.httpGet	178
2.1.186. .spec.containers[].readinessProbe.httpGet.httpHeaders	179
2.1.187. .spec.containers[].readinessProbe.httpGet.httpHeaders[]	179
2.1.188. .spec.containers[].readinessProbe.tcpSocket	180
2.1.189. .spec.containers[].resizePolicy	180
2.1.190. .spec.containers[].resizePolicy[]	180
2.1.191. .spec.containers[].resources	181
2.1.192. .spec.containers[].resources.claims	182
2.1.193. .spec.containers[].resources.claims[]	182
2.1.194. .spec.containers[].securityContext	183
2.1.195. .spec.containers[].securityContext.appArmorProfile	185
2.1.196. .spec.containers[].securityContext.capabilities	186
2.1.197. .spec.containers[].securityContext.seLinuxOptions	186
2.1.198. .spec.containers[].securityContext.seccompProfile	187
2.1.199. .spec.containers[].securityContext.windowsOptions	188
2.1.200. .spec.containers[].startupProbe	189
2.1.201. .spec.containers[].startupProbe.exec	190
2.1.202. .spec.containers[].startupProbe.grpc	191
2.1.203. .spec.containers[].startupProbe.httpGet	191
2.1.204. .spec.containers[].startupProbe.httpGet.httpHeaders	192
2.1.205. .spec.containers[].startupProbe.httpGet.httpHeaders[]	192
2.1.206. .spec.containers[].startupProbe.tcpSocket	193
2.1.207. .spec.containers[].volumeDevices	193
2.1.208. .spec.containers[].volumeDevices[]	193
2.1.209. .spec.containers[].volumeMounts	194
2.1.210. .spec.containers[].volumeMounts[]	194
2.1.211. .spec.dnsConfig	196
2.1.212. .spec.dnsConfig.options	196
2.1.213. .spec.dnsConfig.options[]	197
2.1.214. .spec.hostAliases	197
2.1.215. .spec.hostAliases[]	197
2.1.216. .spec.imagePullSecrets	198
2.1.217. .spec.imagePullSecrets[]	198
2.1.218. .spec.initContainers	198
2.1.219. .spec.initContainers[]	199
2.1.220. .spec.initContainers[].env	206
2.1.221. .spec.initContainers[].env[]	206
2.1.222. .spec.initContainers[].env[].valueFrom	207

2.1.223. .spec.initContainers[].env[].valueFrom.configMapKeyRef	208
2.1.224. .spec.initContainers[].env[].valueFrom.fieldRef	208
2.1.225. .spec.initContainers[].env[].valueFrom.resourceFieldRef	209
2.1.226. .spec.initContainers[].env[].valueFrom.secretKeyRef	209
2.1.227. .spec.initContainers[].envFrom	210
2.1.228. .spec.initContainers[].envFrom[]	210
2.1.229. .spec.initContainers[].envFrom[].configMapRef	211
2.1.230. .spec.initContainers[].envFrom[].secretRef	211
2.1.231. .spec.initContainers[].lifecycle	211
2.1.232. .spec.initContainers[].lifecycle.postStart	213
2.1.233. .spec.initContainers[].lifecycle.postStart.exec	213
2.1.234. .spec.initContainers[].lifecycle.postStart.httpGet	214
2.1.235. .spec.initContainers[].lifecycle.postStart.httpGet.httpHeaders	215
2.1.236. .spec.initContainers[].lifecycle.postStart.httpGet.httpHeaders[]	215
2.1.237. .spec.initContainers[].lifecycle.postStart.sleep	215
2.1.238. .spec.initContainers[].lifecycle.postStart.tcpSocket	216
2.1.239. .spec.initContainers[].lifecycle.preStop	216
2.1.240. .spec.initContainers[].lifecycle.preStop.exec	217
2.1.241. .spec.initContainers[].lifecycle.preStop.httpGet	217
2.1.242. .spec.initContainers[].lifecycle.preStop.httpGet.httpHeaders	218
2.1.243. .spec.initContainers[].lifecycle.preStop.httpGet.httpHeaders[]	218
2.1.244. .spec.initContainers[].lifecycle.preStop.sleep	219
2.1.245. .spec.initContainers[].lifecycle.preStop.tcpSocket	219
2.1.246. .spec.initContainers[].livenessProbe	220
2.1.247. .spec.initContainers[].livenessProbe.exec	221
2.1.248. .spec.initContainers[].livenessProbe.grpc	222
2.1.249. .spec.initContainers[].livenessProbe.httpGet	222
2.1.250. .spec.initContainers[].livenessProbe.httpGet.httpHeaders	223
2.1.251. .spec.initContainers[].livenessProbe.httpGet.httpHeaders[]	223
2.1.252. .spec.initContainers[].livenessProbe.tcpSocket	224
2.1.253. .spec.initContainers[].ports	224
2.1.254. .spec.initContainers[].ports[]	224
2.1.255. .spec.initContainers[].readinessProbe	225
2.1.256. .spec.initContainers[].readinessProbe.exec	227
2.1.257. .spec.initContainers[].readinessProbe.grpc	228
2.1.258. .spec.initContainers[].readinessProbe.httpGet	228
2.1.259. .spec.initContainers[].readinessProbe.httpGet.httpHeaders	229
2.1.260. .spec.initContainers[].readinessProbe.httpGet.httpHeaders[]	229
2.1.261. .spec.initContainers[].readinessProbe.tcpSocket	230
2.1.262. .spec.initContainers[].resizePolicy	230
2.1.263. .spec.initContainers[].resizePolicy[]	230
2.1.264. .spec.initContainers[].resources	231
2.1.265. .spec.initContainers[].resources.claims	232
2.1.266. .spec.initContainers[].resources.claims[]	232
2.1.267. .spec.initContainers[].securityContext	233
2.1.268. .spec.initContainers[].securityContext.appArmorProfile	235
2.1.269. .spec.initContainers[].securityContext.capabilities	236
2.1.270. .spec.initContainers[].securityContext.seLinuxOptions	236
2.1.271. .spec.initContainers[].securityContext.seccompProfile	237
2.1.272. .spec.initContainers[].securityContext.windowsOptions	238
2.1.273. .spec.initContainers[].startupProbe	239
2.1.274. .spec.initContainers[].startupProbe.exec	240
2.1.275. .spec.initContainers[].startupProbe.grpc	241

2.1.276. .spec.initContainers[].startupProbe.httpGet	241
2.1.277. .spec.initContainers[].startupProbe.httpGet.httpHeaders	242
2.1.278. .spec.initContainers[].startupProbe.httpGet.httpHeaders[]	242
2.1.279. .spec.initContainers[].startupProbe.tcpSocket	243
2.1.280. .spec.initContainers[].volumeDevices	243
2.1.281. .spec.initContainers[].volumeDevices[]	243
2.1.282. .spec.initContainers[].volumeMounts	244
2.1.283. .spec.initContainers[].volumeMounts[]	244
2.1.284. .spec.limits	246
2.1.285. .spec.persistentVolumeClaimRetentionPolicy	246
2.1.286. .spec.podMetadata	247
2.1.287. .spec.resources	248
2.1.288. .spec.resources.claims	249
2.1.289. .spec.resources.claims[]	249
2.1.290. .spec.securityContext	250
2.1.291. .spec.securityContext.appArmorProfile	255
2.1.292. .spec.securityContext.seLinuxOptions	255
2.1.293. .spec.securityContext.seccompProfile	256
2.1.294. .spec.securityContext.sysctls	257
2.1.295. .spec.securityContext.sysctls[]	257
2.1.296. .spec.securityContext.windowsOptions	257
2.1.297. .spec.storage	258
2.1.298. .spec.storage.emptyDir	259
2.1.299. .spec.storage.ephemeral	260
2.1.300. .spec.storage.ephemeral.volumeClaimTemplate	261
2.1.301. .spec.storage.ephemeral.volumeClaimTemplate.metadata	262
2.1.302. .spec.storage.ephemeral.volumeClaimTemplate.spec	262
2.1.303. .spec.storage.ephemeral.volumeClaimTemplate.spec.dataSource	266
2.1.304. .spec.storage.ephemeral.volumeClaimTemplate.spec.dataSourceRef	267
2.1.305. .spec.storage.ephemeral.volumeClaimTemplate.spec.resources	268
2.1.306. .spec.storage.ephemeral.volumeClaimTemplate.spec.selector	269
2.1.307. .spec.storage.ephemeral.volumeClaimTemplate.spec.selector.matchExpressions	269
2.1.308. .spec.storage.ephemeral.volumeClaimTemplate.spec.selector.matchExpressions[]	270
2.1.309. .spec.storage.volumeClaimTemplate	270
2.1.310. .spec.storage.volumeClaimTemplate.metadata	271
2.1.311. .spec.storage.volumeClaimTemplate.spec	272
2.1.312. .spec.storage.volumeClaimTemplate.spec.dataSource	276
2.1.313. .spec.storage.volumeClaimTemplate.spec.dataSourceRef	277
2.1.314. .spec.storage.volumeClaimTemplate.spec.resources	278
2.1.315. .spec.storage.volumeClaimTemplate.spec.selector	279
2.1.316. .spec.storage.volumeClaimTemplate.spec.selector.matchExpressions	279
2.1.317. .spec.storage.volumeClaimTemplate.spec.selector.matchExpressions[]	280
2.1.318. .spec.storage.volumeClaimTemplate.status	280
2.1.319. .spec.storage.volumeClaimTemplate.status.conditions	284
2.1.320. .spec.storage.volumeClaimTemplate.status.conditions[]	284
2.1.321. .spec.storage.volumeClaimTemplate.status.modifyVolumeStatus	285
2.1.322. .spec.tolerations	286
2.1.323. .spec.tolerations[]	286
2.1.324. .spec.topologySpreadConstraints	287
2.1.325. .spec.topologySpreadConstraints[]	288
2.1.326. .spec.topologySpreadConstraints[].labelSelector	292
2.1.327. .spec.topologySpreadConstraints[].labelSelector.matchExpressions	293
2.1.328. .spec.topologySpreadConstraints[].labelSelector.matchExpressions[]	293

2.1.329. .spec.volumeMounts	294
2.1.330. .spec.volumeMounts[]	294
2.1.331. .spec.volumes	296
2.1.332. .spec.volumes[]	296
2.1.333. .spec.volumes[].awsElasticBlockStore	304
2.1.334. .spec.volumes[].azureDisk	305
2.1.335. .spec.volumes[].azureFile	306
2.1.336. .spec.volumes[].cephfs	307
2.1.337. .spec.volumes[].cephfs.secretRef	308
2.1.338. .spec.volumes[].cinder	308
2.1.339. .spec.volumes[].cinder.secretRef	309
2.1.340. .spec.volumes[].configMap	310
2.1.341. .spec.volumes[].configMap.items	311
2.1.342. .spec.volumes[].configMap.items[]	311
2.1.343. .spec.volumes[].csi	312
2.1.344. .spec.volumes[].csi.nodePublishSecretRef	313
2.1.345. .spec.volumes[].downwardAPI	314
2.1.346. .spec.volumes[].downwardAPI.items	314
2.1.347. .spec.volumes[].downwardAPI.items[]	315
2.1.348. .spec.volumes[].downwardAPI.items[].fieldRef	316
2.1.349. .spec.volumes[].downwardAPI.items[].resourceFieldRef	316
2.1.350. .spec.volumes[].emptyDir	316
2.1.351. .spec.volumes[].ephemeral	317
2.1.352. .spec.volumes[].ephemeral.volumeClaimTemplate	318
2.1.353. .spec.volumes[].ephemeral.volumeClaimTemplate.metadata	319
2.1.354. .spec.volumes[].ephemeral.volumeClaimTemplate.spec	319
2.1.355. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.dataSource	323
2.1.356. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.dataSourceRef	324
2.1.357. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.resources	325
2.1.358. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.selector	326
2.1.359. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.selector.matchExpressions	326
2.1.360. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.selector.matchExpressions[]	327
2.1.361. .spec.volumes[].fc	327
2.1.362. .spec.volumes[].flexVolume	328
2.1.363. .spec.volumes[].flexVolume.secretRef	329
2.1.364. .spec.volumes[].flocker	329
2.1.365. .spec.volumes[].gcePersistentDisk	330
2.1.366. .spec.volumes[].gitRepo	331
2.1.367. .spec.volumes[].glusterfs	332
2.1.368. .spec.volumes[].hostPath	333
2.1.369. .spec.volumes[].image	333
2.1.370. .spec.volumes[].iscsi	335
2.1.371. .spec.volumes[].iscsi.secretRef	337
2.1.372. .spec.volumes[].nfs	337
2.1.373. .spec.volumes[].persistentVolumeClaim	338
2.1.374. .spec.volumes[].photonPersistentDisk	338
2.1.375. .spec.volumes[].portworxVolume	339
2.1.376. .spec.volumes[].projected	339
2.1.377. .spec.volumes[].projected.sources	340
2.1.378. .spec.volumes[].projected.sources[]	340
2.1.379. .spec.volumes[].projected.sources[].clusterTrustBundle	341
2.1.380. .spec.volumes[].projected.sources[].clusterTrustBundle.labelSelector	342
2.1.381. .spec.volumes[].projected.sources[].clusterTrustBundle.labelSelector.matchExpressions	343

2.1.382. .spec.volumes[].projected.sources[].clusterTrustBundle.labelSelector.matchExpressions[]	343
2.1.383. .spec.volumes[].projected.sources[].configMap	344
2.1.384. .spec.volumes[].projected.sources[].configMap.items	345
2.1.385. .spec.volumes[].projected.sources[].configMap.items[]	345
2.1.386. .spec.volumes[].projected.sources[].downwardAPI	346
2.1.387. .spec.volumes[].projected.sources[].downwardAPI.items	346
2.1.388. .spec.volumes[].projected.sources[].downwardAPI.items[]	346
2.1.389. .spec.volumes[].projected.sources[].downwardAPI.items[].fieldRef	347
2.1.390. .spec.volumes[].projected.sources[].downwardAPI.items[].resourceFieldRef	348
2.1.391. .spec.volumes[].projected.sources[].secret	348
2.1.392. .spec.volumes[].projected.sources[].secret.items	349
2.1.393. .spec.volumes[].projected.sources[].secret.items[]	349
2.1.394. .spec.volumes[].projected.sources[].serviceAccountToken	350
2.1.395. .spec.volumes[].quobyte	351
2.1.396. .spec.volumes[].rbd	352
2.1.397. .spec.volumes[].rbd.secretRef	354
2.1.398. .spec.volumes[].scaleIO	354
2.1.399. .spec.volumes[].scaleIO.secretRef	355
2.1.400. .spec.volumes[].secret	356
2.1.401. .spec.volumes[].secret.items	357
2.1.402. .spec.volumes[].secret.items[]	357
2.1.403. .spec.volumes[].storageos	358
2.1.404. .spec.volumes[].storageos.secretRef	359
2.1.405. .spec.volumes[].vsphereVolume	360
2.1.406. .spec.web	360
2.1.407. .spec.web.httpConfig	361
2.1.408. .spec.web.httpConfig.headers	361
2.1.409. .spec.web.tlsConfig	362
2.1.410. .spec.web.tlsConfig.cert	364
2.1.411. .spec.web.tlsConfig.cert.configMap	365
2.1.412. .spec.web.tlsConfig.cert.secret	365
2.1.413. .spec.web.tlsConfig.client_ca	366
2.1.414. .spec.web.tlsConfig.client_ca.configMap	366
2.1.415. .spec.web.tlsConfig.client_ca.secret	367
2.1.416. .spec.web.tlsConfig.keySecret	367
2.1.417. .status	368
2.1.418. .status.conditions	369
2.1.419. .status.conditions[]	369
2.2. API ENDPOINTS	370
2.2.1. /apis/monitoring.coreos.com/v1/alertmanagers	371
2.2.2. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/alertmanagers	371
2.2.3. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/alertmanagers/{name}	373
2.2.4. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/alertmanagers/{name}/scale	376
2.2.5. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/alertmanagers/{name}/status	379
CHAPTER 3. ALERTMANAGERCONFIG [MONITORING.COREOS.COM/V1BETA1]	382
3.1. SPECIFICATION	382
3.1.1. .spec	383
3.1.2. .spec.inhibitRules	384
3.1.3. .spec.inhibitRules[]	384
3.1.4. .spec.inhibitRules[].sourceMatch	385
3.1.5. .spec.inhibitRules[].sourceMatch[]	385
3.1.6. .spec.inhibitRules[].targetMatch	385

3.1.7. .spec.inhibitRules[].targetMatch[]	385
3.1.8. .spec.receivers	386
3.1.9. .spec.receivers[]	386
3.1.10. .spec.receivers[].discordConfigs	389
3.1.11. .spec.receivers[].discordConfigs[]	389
3.1.12. .spec.receivers[].discordConfigs[].apiURL	390
3.1.13. .spec.receivers[].discordConfigs[].httpConfig	391
3.1.14. .spec.receivers[].discordConfigs[].httpConfig.authorization	393
3.1.15. .spec.receivers[].discordConfigs[].httpConfig.authorization.credentials	393
3.1.16. .spec.receivers[].discordConfigs[].httpConfig.basicAuth	394
3.1.17. .spec.receivers[].discordConfigs[].httpConfig.basicAuth.password	394
3.1.18. .spec.receivers[].discordConfigs[].httpConfig.basicAuth.username	394
3.1.19. .spec.receivers[].discordConfigs[].httpConfig.bearerTokenSecret	395
3.1.20. .spec.receivers[].discordConfigs[].httpConfig.oauth2	396
3.1.21. .spec.receivers[].discordConfigs[].httpConfig.oauth2.clientId	397
3.1.22. .spec.receivers[].discordConfigs[].httpConfig.oauth2.clientId.configMap	398
3.1.23. .spec.receivers[].discordConfigs[].httpConfig.oauth2.clientId.secret	398
3.1.24. .spec.receivers[].discordConfigs[].httpConfig.oauth2.clientSecret	399
3.1.25. .spec.receivers[].discordConfigs[].httpConfig.oauth2.proxyConnectHeader	399
3.1.26. .spec.receivers[].discordConfigs[].httpConfig.oauth2.proxyConnectHeader{}	400
3.1.27. .spec.receivers[].discordConfigs[].httpConfig.oauth2.proxyConnectHeader{}	400
3.1.28. .spec.receivers[].discordConfigs[].httpConfig.oauth2.tlsConfig	400
3.1.29. .spec.receivers[].discordConfigs[].httpConfig.oauth2.tlsConfig.ca	401
3.1.30. .spec.receivers[].discordConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap	401
3.1.31. .spec.receivers[].discordConfigs[].httpConfig.oauth2.tlsConfig.ca.secret	402
3.1.32. .spec.receivers[].discordConfigs[].httpConfig.oauth2.tlsConfig.cert	403
3.1.33. .spec.receivers[].discordConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap	403
3.1.34. .spec.receivers[].discordConfigs[].httpConfig.oauth2.tlsConfig.cert.secret	404
3.1.35. .spec.receivers[].discordConfigs[].httpConfig.oauth2.tlsConfig.keySecret	404
3.1.36. .spec.receivers[].discordConfigs[].httpConfig.proxyConnectHeader	405
3.1.37. .spec.receivers[].discordConfigs[].httpConfig.proxyConnectHeader{}	405
3.1.38. .spec.receivers[].discordConfigs[].httpConfig.proxyConnectHeader{}	405
3.1.39. .spec.receivers[].discordConfigs[].httpConfig.tlsConfig	406
3.1.40. .spec.receivers[].discordConfigs[].httpConfig.tlsConfig.ca	407
3.1.41. .spec.receivers[].discordConfigs[].httpConfig.tlsConfig.ca.configMap	407
3.1.42. .spec.receivers[].discordConfigs[].httpConfig.tlsConfig.ca.secret	408
3.1.43. .spec.receivers[].discordConfigs[].httpConfig.tlsConfig.cert	408
3.1.44. .spec.receivers[].discordConfigs[].httpConfig.tlsConfig.cert.configMap	408
3.1.45. .spec.receivers[].discordConfigs[].httpConfig.tlsConfig.cert.secret	409
3.1.46. .spec.receivers[].discordConfigs[].httpConfig.tlsConfig.keySecret	410
3.1.47. .spec.receivers[].emailConfigs	410
3.1.48. .spec.receivers[].emailConfigs[]	410
3.1.49. .spec.receivers[].emailConfigs[].authPassword	412
3.1.50. .spec.receivers[].emailConfigs[].authSecret	412
3.1.51. .spec.receivers[].emailConfigs[].headers	413
3.1.52. .spec.receivers[].emailConfigs[].headers[]	413
3.1.53. .spec.receivers[].emailConfigs[].tlsConfig	413
3.1.54. .spec.receivers[].emailConfigs[].tlsConfig.ca	414
3.1.55. .spec.receivers[].emailConfigs[].tlsConfig.ca.configMap	414
3.1.56. .spec.receivers[].emailConfigs[].tlsConfig.ca.secret	415
3.1.57. .spec.receivers[].emailConfigs[].tlsConfig.cert	416
3.1.58. .spec.receivers[].emailConfigs[].tlsConfig.cert.configMap	416
3.1.59. .spec.receivers[].emailConfigs[].tlsConfig.cert.secret	417

3.1.60. .spec.receivers[].emailConfigs[].tlsConfig.keySecret	417
3.1.61. .spec.receivers[].msteamsConfigs	418
3.1.62. .spec.receivers[].msteamsConfigs[]	418
3.1.63. .spec.receivers[].msteamsConfigs[].httpConfig	419
3.1.64. .spec.receivers[].msteamsConfigs[].httpConfig.authorization	420
3.1.65. .spec.receivers[].msteamsConfigs[].httpConfig.authorization.credentials	421
3.1.66. .spec.receivers[].msteamsConfigs[].httpConfig.basicAuth	421
3.1.67. .spec.receivers[].msteamsConfigs[].httpConfig.basicAuth.password	422
3.1.68. .spec.receivers[].msteamsConfigs[].httpConfig.basicAuth.username	422
3.1.69. .spec.receivers[].msteamsConfigs[].httpConfig.bearerTokenSecret	423
3.1.70. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2	424
3.1.71. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.clientId	425
3.1.72. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.clientId.configMap	425
3.1.73. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.clientId.secret	426
3.1.74. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.clientSecret	427
3.1.75. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.proxyConnectHeader	427
3.1.76. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.proxyConnectHeader{}	428
3.1.77. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.proxyConnectHeader{}	428
3.1.78. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.tlsConfig	428
3.1.79. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.tlsConfig.ca	429
3.1.80. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap	429
3.1.81. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.tlsConfig.ca.secret	430
3.1.82. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.tlsConfig.cert	431
3.1.83. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap	431
3.1.84. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.tlsConfig.cert.secret	432
3.1.85. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.tlsConfig.keySecret	432
3.1.86. .spec.receivers[].msteamsConfigs[].httpConfig.proxyConnectHeader	433
3.1.87. .spec.receivers[].msteamsConfigs[].httpConfig.proxyConnectHeader{}	433
3.1.88. .spec.receivers[].msteamsConfigs[].httpConfig.proxyConnectHeader{}	433
3.1.89. .spec.receivers[].msteamsConfigs[].httpConfig.tlsConfig	434
3.1.90. .spec.receivers[].msteamsConfigs[].httpConfig.tlsConfig.ca	435
3.1.91. .spec.receivers[].msteamsConfigs[].httpConfig.tlsConfig.ca.configMap	435
3.1.92. .spec.receivers[].msteamsConfigs[].httpConfig.tlsConfig.ca.secret	436
3.1.93. .spec.receivers[].msteamsConfigs[].httpConfig.tlsConfig.cert	436
3.1.94. .spec.receivers[].msteamsConfigs[].httpConfig.tlsConfig.cert.configMap	436
3.1.95. .spec.receivers[].msteamsConfigs[].httpConfig.tlsConfig.cert.secret	437
3.1.96. .spec.receivers[].msteamsConfigs[].httpConfig.tlsConfig.keySecret	438
3.1.97. .spec.receivers[].msteamsConfigs[].webhookUrl	438
3.1.98. .spec.receivers[].msteamsv2Configs	439
3.1.99. .spec.receivers[].msteamsv2Configs[]	439
3.1.100. .spec.receivers[].msteamsv2Configs[].httpConfig	440
3.1.101. .spec.receivers[].msteamsv2Configs[].httpConfig.authorization	441
3.1.102. .spec.receivers[].msteamsv2Configs[].httpConfig.authorization.credentials	442
3.1.103. .spec.receivers[].msteamsv2Configs[].httpConfig.basicAuth	442
3.1.104. .spec.receivers[].msteamsv2Configs[].httpConfig.basicAuth.password	443
3.1.105. .spec.receivers[].msteamsv2Configs[].httpConfig.basicAuth.username	443
3.1.106. .spec.receivers[].msteamsv2Configs[].httpConfig.bearerTokenSecret	444
3.1.107. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2	444
3.1.108. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.clientId	446
3.1.109. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.clientId.configMap	446
3.1.110. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.clientId.secret	447
3.1.111. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.clientSecret	448
3.1.112. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.proxyConnectHeader	448

3.1.113. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.proxyConnectHeader{}	448
3.1.114. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.proxyConnectHeader{}}[]	448
3.1.115. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.tlsConfig	449
3.1.116. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.tlsConfig.ca	450
3.1.117. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.tlsConfig.ca.configMap	450
3.1.118. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.tlsConfig.ca.secret	451
3.1.119. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.tlsConfig.cert	451
3.1.120. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.tlsConfig.cert.configMap	452
3.1.121. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.tlsConfig.cert.secret	452
3.1.122. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.tlsConfig.keySecret	453
3.1.123. .spec.receivers[].msteamsv2Configs[].httpConfig.proxyConnectHeader	453
3.1.124. .spec.receivers[].msteamsv2Configs[].httpConfig.proxyConnectHeader{}	454
3.1.125. .spec.receivers[].msteamsv2Configs[].httpConfig.proxyConnectHeader{}}[]	454
3.1.126. .spec.receivers[].msteamsv2Configs[].httpConfig.tlsConfig	454
3.1.127. .spec.receivers[].msteamsv2Configs[].httpConfig.tlsConfig.ca	455
3.1.128. .spec.receivers[].msteamsv2Configs[].httpConfig.tlsConfig.ca.configMap	455
3.1.129. .spec.receivers[].msteamsv2Configs[].httpConfig.tlsConfig.ca.secret	456
3.1.130. .spec.receivers[].msteamsv2Configs[].httpConfig.tlsConfig.cert	457
3.1.131. .spec.receivers[].msteamsv2Configs[].httpConfig.tlsConfig.cert.configMap	457
3.1.132. .spec.receivers[].msteamsv2Configs[].httpConfig.tlsConfig.cert.secret	458
3.1.133. .spec.receivers[].msteamsv2Configs[].httpConfig.tlsConfig.keySecret	458
3.1.134. .spec.receivers[].msteamsv2Configs[].webhookURL	459
3.1.135. .spec.receivers[].opsgenieConfigs	459
3.1.136. .spec.receivers[].opsgenieConfigs[]	460
3.1.137. .spec.receivers[].opsgenieConfigs[].apiKey	461
3.1.138. .spec.receivers[].opsgenieConfigs[].details	461
3.1.139. .spec.receivers[].opsgenieConfigs[].details[]	462
3.1.140. .spec.receivers[].opsgenieConfigs[].httpConfig	462
3.1.141. .spec.receivers[].opsgenieConfigs[].httpConfig.authorization	464
3.1.142. .spec.receivers[].opsgenieConfigs[].httpConfig.authorization.credentials	464
3.1.143. .spec.receivers[].opsgenieConfigs[].httpConfig.basicAuth	465
3.1.144. .spec.receivers[].opsgenieConfigs[].httpConfig.basicAuth.password	465
3.1.145. .spec.receivers[].opsgenieConfigs[].httpConfig.basicAuth.username	466
3.1.146. .spec.receivers[].opsgenieConfigs[].httpConfig.bearerTokenSecret	467
3.1.147. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2	467
3.1.148. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.clientId	469
3.1.149. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.clientId.configMap	469
3.1.150. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.clientId.secret	470
3.1.151. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.clientSecret	470
3.1.152. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.proxyConnectHeader	471
3.1.153. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.proxyConnectHeader{}	471
3.1.154. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.proxyConnectHeader{}}[]	471
3.1.155. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.tlsConfig	472
3.1.156. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.tlsConfig.ca	473
3.1.157. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap	473
3.1.158. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.tlsConfig.ca.secret	474
3.1.159. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.tlsConfig.cert	474
3.1.160. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap	475
3.1.161. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.tlsConfig.cert.secret	475
3.1.162. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.tlsConfig.keySecret	476
3.1.163. .spec.receivers[].opsgenieConfigs[].httpConfig.proxyConnectHeader	477
3.1.164. .spec.receivers[].opsgenieConfigs[].httpConfig.proxyConnectHeader{}	477
3.1.165. .spec.receivers[].opsgenieConfigs[].httpConfig.proxyConnectHeader{}}[]	477

3.1.166. .spec.receivers[].opsgenieConfigs[].httpConfig.tlsConfig	477
3.1.167. .spec.receivers[].opsgenieConfigs[].httpConfig.tlsConfig.ca	478
3.1.168. .spec.receivers[].opsgenieConfigs[].httpConfig.tlsConfig.ca.configMap	478
3.1.169. .spec.receivers[].opsgenieConfigs[].httpConfig.tlsConfig.ca.secret	479
3.1.170. .spec.receivers[].opsgenieConfigs[].httpConfig.tlsConfig.cert	480
3.1.171. .spec.receivers[].opsgenieConfigs[].httpConfig.tlsConfig.cert.configMap	480
3.1.172. .spec.receivers[].opsgenieConfigs[].httpConfig.tlsConfig.cert.secret	481
3.1.173. .spec.receivers[].opsgenieConfigs[].httpConfig.tlsConfig.keySecret	481
3.1.174. .spec.receivers[].opsgenieConfigs[].responders	482
3.1.175. .spec.receivers[].opsgenieConfigs[].responders[]	482
3.1.176. .spec.receivers[].pagerdutyConfigs	483
3.1.177. .spec.receivers[].pagerdutyConfigs[]	483
3.1.178. .spec.receivers[].pagerdutyConfigs[].details	484
3.1.179. .spec.receivers[].pagerdutyConfigs[].details[]	485
3.1.180. .spec.receivers[].pagerdutyConfigs[].httpConfig	485
3.1.181. .spec.receivers[].pagerdutyConfigs[].httpConfig.authorization	487
3.1.182. .spec.receivers[].pagerdutyConfigs[].httpConfig.authorization.credentials	487
3.1.183. .spec.receivers[].pagerdutyConfigs[].httpConfig.basicAuth	488
3.1.184. .spec.receivers[].pagerdutyConfigs[].httpConfig.basicAuth.password	488
3.1.185. .spec.receivers[].pagerdutyConfigs[].httpConfig.basicAuth.username	489
3.1.186. .spec.receivers[].pagerdutyConfigs[].httpConfig.bearerTokenSecret	489
3.1.187. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2	490
3.1.188. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.clientId	492
3.1.189. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.clientId.configMap	492
3.1.190. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.clientId.secret	493
3.1.191. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.clientSecret	493
3.1.192. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.proxyConnectHeader	494
3.1.193. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.proxyConnectHeader{}	494
3.1.194. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.proxyConnectHeader{}	494
3.1.195. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.tlsConfig	495
3.1.196. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.tlsConfig.ca	496
3.1.197. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap	496
3.1.198. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.tlsConfig.ca.secret	497
3.1.199. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.tlsConfig.cert	497
3.1.200. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap	497
3.1.201. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.tlsConfig.cert.secret	498
3.1.202. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.tlsConfig.keySecret	499
3.1.203. .spec.receivers[].pagerdutyConfigs[].httpConfig.proxyConnectHeader	499
3.1.204. .spec.receivers[].pagerdutyConfigs[].httpConfig.proxyConnectHeader{}	499
3.1.205. .spec.receivers[].pagerdutyConfigs[].httpConfig.proxyConnectHeader{}	500
3.1.206. .spec.receivers[].pagerdutyConfigs[].httpConfig.tlsConfig	500
3.1.207. .spec.receivers[].pagerdutyConfigs[].httpConfig.tlsConfig.ca	501
3.1.208. .spec.receivers[].pagerdutyConfigs[].httpConfig.tlsConfig.ca.configMap	501
3.1.209. .spec.receivers[].pagerdutyConfigs[].httpConfig.tlsConfig.ca.secret	502
3.1.210. .spec.receivers[].pagerdutyConfigs[].httpConfig.tlsConfig.cert	502
3.1.211. .spec.receivers[].pagerdutyConfigs[].httpConfig.tlsConfig.cert.configMap	503
3.1.212. .spec.receivers[].pagerdutyConfigs[].httpConfig.tlsConfig.cert.secret	503
3.1.213. .spec.receivers[].pagerdutyConfigs[].httpConfig.tlsConfig.keySecret	504
3.1.214. .spec.receivers[].pagerdutyConfigs[].pagerDutyImageConfigs	505
3.1.215. .spec.receivers[].pagerdutyConfigs[].pagerDutyImageConfigs[]	505
3.1.216. .spec.receivers[].pagerdutyConfigs[].pagerDutyLinkConfigs	505
3.1.217. .spec.receivers[].pagerdutyConfigs[].pagerDutyLinkConfigs[]	505
3.1.218. .spec.receivers[].pagerdutyConfigs[].routingKey	506

3.1.219. .spec.receivers[].pagerdutyConfigs[].serviceKey	506
3.1.220. .spec.receivers[].pushoverConfigs	507
3.1.221. .spec.receivers[].pushoverConfigs[]	507
3.1.222. .spec.receivers[].pushoverConfigs[].httpConfig	509
3.1.223. .spec.receivers[].pushoverConfigs[].httpConfig.authorization	510
3.1.224. .spec.receivers[].pushoverConfigs[].httpConfig.authorization.credentials	511
3.1.225. .spec.receivers[].pushoverConfigs[].httpConfig.basicAuth	511
3.1.226. .spec.receivers[].pushoverConfigs[].httpConfig.basicAuth.password	512
3.1.227. .spec.receivers[].pushoverConfigs[].httpConfig.basicAuth.username	512
3.1.228. .spec.receivers[].pushoverConfigs[].httpConfig.bearerTokenSecret	513
3.1.229. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2	514
3.1.230. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.clientId	515
3.1.231. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.clientId.configMap	515
3.1.232. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.clientId.secret	516
3.1.233. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.clientSecret	517
3.1.234. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.proxyConnectHeader	517
3.1.235. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.proxyConnectHeader{}	518
3.1.236. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.proxyConnectHeader{}	518
3.1.237. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.tlsConfig	518
3.1.238. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.tlsConfig.ca	519
3.1.239. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap	519
3.1.240. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.tlsConfig.ca.secret	520
3.1.241. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.tlsConfig.cert	521
3.1.242. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap	521
3.1.243. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.tlsConfig.cert.secret	522
3.1.244. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.tlsConfig.keySecret	522
3.1.245. .spec.receivers[].pushoverConfigs[].httpConfig.proxyConnectHeader	523
3.1.246. .spec.receivers[].pushoverConfigs[].httpConfig.proxyConnectHeader{}	523
3.1.247. .spec.receivers[].pushoverConfigs[].httpConfig.proxyConnectHeader{}	523
3.1.248. .spec.receivers[].pushoverConfigs[].httpConfig.tlsConfig	524
3.1.249. .spec.receivers[].pushoverConfigs[].httpConfig.tlsConfig.ca	525
3.1.250. .spec.receivers[].pushoverConfigs[].httpConfig.tlsConfig.ca.configMap	525
3.1.251. .spec.receivers[].pushoverConfigs[].httpConfig.tlsConfig.ca.secret	526
3.1.252. .spec.receivers[].pushoverConfigs[].httpConfig.tlsConfig.cert	526
3.1.253. .spec.receivers[].pushoverConfigs[].httpConfig.tlsConfig.cert.configMap	526
3.1.254. .spec.receivers[].pushoverConfigs[].httpConfig.tlsConfig.cert.secret	527
3.1.255. .spec.receivers[].pushoverConfigs[].httpConfig.tlsConfig.keySecret	528
3.1.256. .spec.receivers[].pushoverConfigs[].token	528
3.1.257. .spec.receivers[].pushoverConfigs[].userKey	529
3.1.258. .spec.receivers[].rocketchatConfigs	529
3.1.259. .spec.receivers[].rocketchatConfigs[]	529
3.1.260. .spec.receivers[].rocketchatConfigs[].actions	531
3.1.261. .spec.receivers[].rocketchatConfigs[].actions[]	531
3.1.262. .spec.receivers[].rocketchatConfigs[].fields	531
3.1.263. .spec.receivers[].rocketchatConfigs[].fields[]	531
3.1.264. .spec.receivers[].rocketchatConfigs[].httpConfig	532
3.1.265. .spec.receivers[].rocketchatConfigs[].httpConfig.authorization	534
3.1.266. .spec.receivers[].rocketchatConfigs[].httpConfig.authorization.credentials	534
3.1.267. .spec.receivers[].rocketchatConfigs[].httpConfig.basicAuth	535
3.1.268. .spec.receivers[].rocketchatConfigs[].httpConfig.basicAuth.password	535
3.1.269. .spec.receivers[].rocketchatConfigs[].httpConfig.basicAuth.username	535
3.1.270. .spec.receivers[].rocketchatConfigs[].httpConfig.bearerTokenSecret	536
3.1.271. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2	537

3.1.272. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.clientId	538
3.1.273. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.clientId.configMap	539
3.1.274. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.clientId.secret	539
3.1.275. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.clientSecret	540
3.1.276. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.proxyConnectHeader	540
3.1.277. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.proxyConnectHeader{}	541
3.1.278. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.proxyConnectHeader{}	541
3.1.279. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.tlsConfig	541
3.1.280. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.tlsConfig.ca	542
3.1.281. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap	542
3.1.282. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.tlsConfig.ca.secret	543
3.1.283. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.tlsConfig.cert	544
3.1.284. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap	544
3.1.285. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.tlsConfig.cert.secret	545
3.1.286. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.tlsConfig.keySecret	545
3.1.287. .spec.receivers[].rocketchatConfigs[].httpConfig.proxyConnectHeader	546
3.1.288. .spec.receivers[].rocketchatConfigs[].httpConfig.proxyConnectHeader{}	546
3.1.289. .spec.receivers[].rocketchatConfigs[].httpConfig.proxyConnectHeader{}	546
3.1.290. .spec.receivers[].rocketchatConfigs[].httpConfig.tlsConfig	547
3.1.291. .spec.receivers[].rocketchatConfigs[].httpConfig.tlsConfig.ca	548
3.1.292. .spec.receivers[].rocketchatConfigs[].httpConfig.tlsConfig.ca.configMap	548
3.1.293. .spec.receivers[].rocketchatConfigs[].httpConfig.tlsConfig.ca.secret	549
3.1.294. .spec.receivers[].rocketchatConfigs[].httpConfig.tlsConfig.cert	549
3.1.295. .spec.receivers[].rocketchatConfigs[].httpConfig.tlsConfig.cert.configMap	549
3.1.296. .spec.receivers[].rocketchatConfigs[].httpConfig.tlsConfig.cert.secret	550
3.1.297. .spec.receivers[].rocketchatConfigs[].httpConfig.tlsConfig.keySecret	551
3.1.298. .spec.receivers[].rocketchatConfigs[].token	551
3.1.299. .spec.receivers[].rocketchatConfigs[].tokenID	552
3.1.300. .spec.receivers[].slackConfigs	552
3.1.301. .spec.receivers[].slackConfigs[]	553
3.1.302. .spec.receivers[].slackConfigs[].actions	555
3.1.303. .spec.receivers[].slackConfigs[].actions[]	555
3.1.304. .spec.receivers[].slackConfigs[].actions[].confirm	555
3.1.305. .spec.receivers[].slackConfigs[].apiURL	556
3.1.306. .spec.receivers[].slackConfigs[].fields	556
3.1.307. .spec.receivers[].slackConfigs[].fields[]	557
3.1.308. .spec.receivers[].slackConfigs[].httpConfig	557
3.1.309. .spec.receivers[].slackConfigs[].httpConfig.authorization	559
3.1.310. .spec.receivers[].slackConfigs[].httpConfig.authorization.credentials	559
3.1.311. .spec.receivers[].slackConfigs[].httpConfig.basicAuth	560
3.1.312. .spec.receivers[].slackConfigs[].httpConfig.basicAuth.password	560
3.1.313. .spec.receivers[].slackConfigs[].httpConfig.basicAuth.username	561
3.1.314. .spec.receivers[].slackConfigs[].httpConfig.bearerTokenSecret	561
3.1.315. .spec.receivers[].slackConfigs[].httpConfig.oauth2	562
3.1.316. .spec.receivers[].slackConfigs[].httpConfig.oauth2.clientId	564
3.1.317. .spec.receivers[].slackConfigs[].httpConfig.oauth2.clientId.configMap	564
3.1.318. .spec.receivers[].slackConfigs[].httpConfig.oauth2.clientId.secret	565
3.1.319. .spec.receivers[].slackConfigs[].httpConfig.oauth2.clientSecret	565
3.1.320. .spec.receivers[].slackConfigs[].httpConfig.oauth2.proxyConnectHeader	566
3.1.321. .spec.receivers[].slackConfigs[].httpConfig.oauth2.proxyConnectHeader{}	566
3.1.322. .spec.receivers[].slackConfigs[].httpConfig.oauth2.proxyConnectHeader{}	566
3.1.323. .spec.receivers[].slackConfigs[].httpConfig.oauth2.tlsConfig	567
3.1.324. .spec.receivers[].slackConfigs[].httpConfig.oauth2.tlsConfig.ca	568

3.1.325. .spec.receivers[].slackConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap	568
3.1.326. .spec.receivers[].slackConfigs[].httpConfig.oauth2.tlsConfig.ca.secret	569
3.1.327. .spec.receivers[].slackConfigs[].httpConfig.oauth2.tlsConfig.cert	569
3.1.328. .spec.receivers[].slackConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap	569
3.1.329. .spec.receivers[].slackConfigs[].httpConfig.oauth2.tlsConfig.cert.secret	570
3.1.330. .spec.receivers[].slackConfigs[].httpConfig.oauth2.tlsConfig.keySecret	571
3.1.331. .spec.receivers[].slackConfigs[].httpConfig.proxyConnectHeader	571
3.1.332. .spec.receivers[].slackConfigs[].httpConfig.proxyConnectHeader{}	571
3.1.333. .spec.receivers[].slackConfigs[].httpConfig.proxyConnectHeader{}	572
3.1.334. .spec.receivers[].slackConfigs[].httpConfig.tlsConfig	572
3.1.335. .spec.receivers[].slackConfigs[].httpConfig.tlsConfig.ca	573
3.1.336. .spec.receivers[].slackConfigs[].httpConfig.tlsConfig.ca.configMap	573
3.1.337. .spec.receivers[].slackConfigs[].httpConfig.tlsConfig.ca.secret	574
3.1.338. .spec.receivers[].slackConfigs[].httpConfig.tlsConfig.cert	574
3.1.339. .spec.receivers[].slackConfigs[].httpConfig.tlsConfig.cert.configMap	575
3.1.340. .spec.receivers[].slackConfigs[].httpConfig.tlsConfig.cert.secret	575
3.1.341. .spec.receivers[].slackConfigs[].httpConfig.tlsConfig.keySecret	576
3.1.342. .spec.receivers[].snsConfigs	577
3.1.343. .spec.receivers[].snsConfigs[]	577
3.1.344. .spec.receivers[].snsConfigs[].httpConfig	578
3.1.345. .spec.receivers[].snsConfigs[].httpConfig.authorization	579
3.1.346. .spec.receivers[].snsConfigs[].httpConfig.authorization.credentials	580
3.1.347. .spec.receivers[].snsConfigs[].httpConfig.basicAuth	580
3.1.348. .spec.receivers[].snsConfigs[].httpConfig.basicAuth.password	581
3.1.349. .spec.receivers[].snsConfigs[].httpConfig.basicAuth.username	581
3.1.350. .spec.receivers[].snsConfigs[].httpConfig.bearerTokenSecret	582
3.1.351. .spec.receivers[].snsConfigs[].httpConfig.oauth2	583
3.1.352. .spec.receivers[].snsConfigs[].httpConfig.oauth2.clientId	584
3.1.353. .spec.receivers[].snsConfigs[].httpConfig.oauth2.clientId.configMap	584
3.1.354. .spec.receivers[].snsConfigs[].httpConfig.oauth2.clientId.secret	585
3.1.355. .spec.receivers[].snsConfigs[].httpConfig.oauth2.clientSecret	586
3.1.356. .spec.receivers[].snsConfigs[].httpConfig.oauth2.proxyConnectHeader	586
3.1.357. .spec.receivers[].snsConfigs[].httpConfig.oauth2.proxyConnectHeader{}	587
3.1.358. .spec.receivers[].snsConfigs[].httpConfig.oauth2.proxyConnectHeader{}	587
3.1.359. .spec.receivers[].snsConfigs[].httpConfig.oauth2.tlsConfig	587
3.1.360. .spec.receivers[].snsConfigs[].httpConfig.oauth2.tlsConfig.ca	588
3.1.361. .spec.receivers[].snsConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap	588
3.1.362. .spec.receivers[].snsConfigs[].httpConfig.oauth2.tlsConfig.ca.secret	589
3.1.363. .spec.receivers[].snsConfigs[].httpConfig.oauth2.tlsConfig.cert	590
3.1.364. .spec.receivers[].snsConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap	590
3.1.365. .spec.receivers[].snsConfigs[].httpConfig.oauth2.tlsConfig.cert.secret	591
3.1.366. .spec.receivers[].snsConfigs[].httpConfig.oauth2.tlsConfig.keySecret	591
3.1.367. .spec.receivers[].snsConfigs[].httpConfig.proxyConnectHeader	592
3.1.368. .spec.receivers[].snsConfigs[].httpConfig.proxyConnectHeader{}	592
3.1.369. .spec.receivers[].snsConfigs[].httpConfig.proxyConnectHeader{}	592
3.1.370. .spec.receivers[].snsConfigs[].httpConfig.tlsConfig	593
3.1.371. .spec.receivers[].snsConfigs[].httpConfig.tlsConfig.ca	594
3.1.372. .spec.receivers[].snsConfigs[].httpConfig.tlsConfig.ca.configMap	594
3.1.373. .spec.receivers[].snsConfigs[].httpConfig.tlsConfig.ca.secret	595
3.1.374. .spec.receivers[].snsConfigs[].httpConfig.tlsConfig.cert	595
3.1.375. .spec.receivers[].snsConfigs[].httpConfig.tlsConfig.cert.configMap	596
3.1.376. .spec.receivers[].snsConfigs[].httpConfig.tlsConfig.cert.secret	596
3.1.377. .spec.receivers[].snsConfigs[].httpConfig.tlsConfig.keySecret	597

3.1.378. .spec.receivers[].snsConfigs[].sigv4	597
3.1.379. .spec.receivers[].snsConfigs[].sigv4.accessKey	598
3.1.380. .spec.receivers[].snsConfigs[].sigv4.secretKey	599
3.1.381. .spec.receivers[].telegramConfigs	599
3.1.382. .spec.receivers[].telegramConfigs[]	600
3.1.383. .spec.receivers[].telegramConfigs[].botToken	601
3.1.384. .spec.receivers[].telegramConfigs[].httpConfig	601
3.1.385. .spec.receivers[].telegramConfigs[].httpConfig.authorization	603
3.1.386. .spec.receivers[].telegramConfigs[].httpConfig.authorization.credentials	604
3.1.387. .spec.receivers[].telegramConfigs[].httpConfig.basicAuth	604
3.1.388. .spec.receivers[].telegramConfigs[].httpConfig.basicAuth.password	604
3.1.389. .spec.receivers[].telegramConfigs[].httpConfig.basicAuth.username	605
3.1.390. .spec.receivers[].telegramConfigs[].httpConfig.bearerTokenSecret	606
3.1.391. .spec.receivers[].telegramConfigs[].httpConfig.oauth2	606
3.1.392. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.clientId	608
3.1.393. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.clientId.configMap	608
3.1.394. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.clientId.secret	609
3.1.395. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.clientSecret	610
3.1.396. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.proxyConnectHeader	610
3.1.397. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.proxyConnectHeader{}	610
3.1.398. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.proxyConnectHeader{}}[]	610
3.1.399. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.tlsConfig	611
3.1.400. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.tlsConfig.ca	612
3.1.401. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap	612
3.1.402. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.tlsConfig.ca.secret	613
3.1.403. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.tlsConfig.cert	613
3.1.404. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap	614
3.1.405. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.tlsConfig.cert.secret	614
3.1.406. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.tlsConfig.keySecret	615
3.1.407. .spec.receivers[].telegramConfigs[].httpConfig.proxyConnectHeader	615
3.1.408. .spec.receivers[].telegramConfigs[].httpConfig.proxyConnectHeader{}	616
3.1.409. .spec.receivers[].telegramConfigs[].httpConfig.proxyConnectHeader{}}[]	616
3.1.410. .spec.receivers[].telegramConfigs[].httpConfig.tlsConfig	616
3.1.411. .spec.receivers[].telegramConfigs[].httpConfig.tlsConfig.ca	617
3.1.412. .spec.receivers[].telegramConfigs[].httpConfig.tlsConfig.ca.configMap	617
3.1.413. .spec.receivers[].telegramConfigs[].httpConfig.tlsConfig.ca.secret	618
3.1.414. .spec.receivers[].telegramConfigs[].httpConfig.tlsConfig.cert	619
3.1.415. .spec.receivers[].telegramConfigs[].httpConfig.tlsConfig.cert.configMap	619
3.1.416. .spec.receivers[].telegramConfigs[].httpConfig.tlsConfig.cert.secret	620
3.1.417. .spec.receivers[].telegramConfigs[].httpConfig.tlsConfig.keySecret	620
3.1.418. .spec.receivers[].victoropsConfigs	621
3.1.419. .spec.receivers[].victoropsConfigs[]	621
3.1.420. .spec.receivers[].victoropsConfigs[].apiKey	622
3.1.421. .spec.receivers[].victoropsConfigs[].customFields	623
3.1.422. .spec.receivers[].victoropsConfigs[].customFields[]	623
3.1.423. .spec.receivers[].victoropsConfigs[].httpConfig	623
3.1.424. .spec.receivers[].victoropsConfigs[].httpConfig.authorization	625
3.1.425. .spec.receivers[].victoropsConfigs[].httpConfig.authorization.credentials	625
3.1.426. .spec.receivers[].victoropsConfigs[].httpConfig.basicAuth	626
3.1.427. .spec.receivers[].victoropsConfigs[].httpConfig.basicAuth.password	626
3.1.428. .spec.receivers[].victoropsConfigs[].httpConfig.basicAuth.username	627
3.1.429. .spec.receivers[].victoropsConfigs[].httpConfig.bearerTokenSecret	628
3.1.430. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2	628

3.1.431. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.clientId	630
3.1.432. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.clientId.configMap	630
3.1.433. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.clientId.secret	631
3.1.434. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.clientSecret	632
3.1.435. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.proxyConnectHeader	632
3.1.436. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.proxyConnectHeader{}	632
3.1.437. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.proxyConnectHeader{}	632
3.1.438. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.tlsConfig	633
3.1.439. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.tlsConfig.ca	634
3.1.440. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap	634
3.1.441. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.tlsConfig.ca.secret	635
3.1.442. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.tlsConfig.cert	635
3.1.443. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap	636
3.1.444. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.tlsConfig.cert.secret	636
3.1.445. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.tlsConfig.keySecret	637
3.1.446. .spec.receivers[].victoropsConfigs[].httpConfig.proxyConnectHeader	637
3.1.447. .spec.receivers[].victoropsConfigs[].httpConfig.proxyConnectHeader{}	638
3.1.448. .spec.receivers[].victoropsConfigs[].httpConfig.proxyConnectHeader{}	638
3.1.449. .spec.receivers[].victoropsConfigs[].httpConfig.tlsConfig	638
3.1.450. .spec.receivers[].victoropsConfigs[].httpConfig.tlsConfig.ca	639
3.1.451. .spec.receivers[].victoropsConfigs[].httpConfig.tlsConfig.ca.configMap	639
3.1.452. .spec.receivers[].victoropsConfigs[].httpConfig.tlsConfig.ca.secret	640
3.1.453. .spec.receivers[].victoropsConfigs[].httpConfig.tlsConfig.cert	641
3.1.454. .spec.receivers[].victoropsConfigs[].httpConfig.tlsConfig.cert.configMap	641
3.1.455. .spec.receivers[].victoropsConfigs[].httpConfig.tlsConfig.cert.secret	642
3.1.456. .spec.receivers[].victoropsConfigs[].httpConfig.tlsConfig.keySecret	642
3.1.457. .spec.receivers[].webexConfigs	643
3.1.458. .spec.receivers[].webexConfigs[]	643
3.1.459. .spec.receivers[].webexConfigs[].httpConfig	644
3.1.460. .spec.receivers[].webexConfigs[].httpConfig.authorization	645
3.1.461. .spec.receivers[].webexConfigs[].httpConfig.authorization.credentials	646
3.1.462. .spec.receivers[].webexConfigs[].httpConfig.basicAuth	646
3.1.463. .spec.receivers[].webexConfigs[].httpConfig.basicAuth.password	647
3.1.464. .spec.receivers[].webexConfigs[].httpConfig.basicAuth.username	647
3.1.465. .spec.receivers[].webexConfigs[].httpConfig.bearerTokenSecret	648
3.1.466. .spec.receivers[].webexConfigs[].httpConfig.oauth2	649
3.1.467. .spec.receivers[].webexConfigs[].httpConfig.oauth2.clientId	650
3.1.468. .spec.receivers[].webexConfigs[].httpConfig.oauth2.clientId.configMap	650
3.1.469. .spec.receivers[].webexConfigs[].httpConfig.oauth2.clientId.secret	651
3.1.470. .spec.receivers[].webexConfigs[].httpConfig.oauth2.clientSecret	652
3.1.471. .spec.receivers[].webexConfigs[].httpConfig.oauth2.proxyConnectHeader	652
3.1.472. .spec.receivers[].webexConfigs[].httpConfig.oauth2.proxyConnectHeader{}	653
3.1.473. .spec.receivers[].webexConfigs[].httpConfig.oauth2.proxyConnectHeader{}	653
3.1.474. .spec.receivers[].webexConfigs[].httpConfig.oauth2.tlsConfig	653
3.1.475. .spec.receivers[].webexConfigs[].httpConfig.oauth2.tlsConfig.ca	654
3.1.476. .spec.receivers[].webexConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap	654
3.1.477. .spec.receivers[].webexConfigs[].httpConfig.oauth2.tlsConfig.ca.secret	655
3.1.478. .spec.receivers[].webexConfigs[].httpConfig.oauth2.tlsConfig.cert	656
3.1.479. .spec.receivers[].webexConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap	656
3.1.480. .spec.receivers[].webexConfigs[].httpConfig.oauth2.tlsConfig.cert.secret	657
3.1.481. .spec.receivers[].webexConfigs[].httpConfig.oauth2.tlsConfig.keySecret	657
3.1.482. .spec.receivers[].webexConfigs[].httpConfig.proxyConnectHeader	658
3.1.483. .spec.receivers[].webexConfigs[].httpConfig.proxyConnectHeader{}	658

3.1.484. .spec.receivers[].webexConfigs[].httpConfig.proxyConnectHeader{}	658
3.1.485. .spec.receivers[].webexConfigs[].httpConfig.tlsConfig	659
3.1.486. .spec.receivers[].webexConfigs[].httpConfig.tlsConfig.ca	660
3.1.487. .spec.receivers[].webexConfigs[].httpConfig.tlsConfig.ca.configMap	660
3.1.488. .spec.receivers[].webexConfigs[].httpConfig.tlsConfig.ca.secret	661
3.1.489. .spec.receivers[].webexConfigs[].httpConfig.tlsConfig.cert	661
3.1.490. .spec.receivers[].webexConfigs[].httpConfig.tlsConfig.cert.configMap	661
3.1.491. .spec.receivers[].webexConfigs[].httpConfig.tlsConfig.cert.secret	662
3.1.492. .spec.receivers[].webexConfigs[].httpConfig.tlsConfig.keySecret	663
3.1.493. .spec.receivers[].webhookConfigs	663
3.1.494. .spec.receivers[].webhookConfigs[]	663
3.1.495. .spec.receivers[].webhookConfigs[].httpConfig	664
3.1.496. .spec.receivers[].webhookConfigs[].httpConfig.authorization	666
3.1.497. .spec.receivers[].webhookConfigs[].httpConfig.authorization.credentials	666
3.1.498. .spec.receivers[].webhookConfigs[].httpConfig.basicAuth	667
3.1.499. .spec.receivers[].webhookConfigs[].httpConfig.basicAuth.password	667
3.1.500. .spec.receivers[].webhookConfigs[].httpConfig.basicAuth.username	668
3.1.501. .spec.receivers[].webhookConfigs[].httpConfig.bearerTokenSecret	669
3.1.502. .spec.receivers[].webhookConfigs[].httpConfig.oauth2	669
3.1.503. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.clientId	671
3.1.504. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.clientId.configMap	671
3.1.505. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.clientId.secret	672
3.1.506. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.clientSecret	673
3.1.507. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.proxyConnectHeader	673
3.1.508. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.proxyConnectHeader{}	673
3.1.509. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.proxyConnectHeader{}	673
3.1.510. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.tlsConfig	674
3.1.511. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.tlsConfig.ca	675
3.1.512. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap	675
3.1.513. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.tlsConfig.ca.secret	676
3.1.514. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.tlsConfig.cert	676
3.1.515. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap	677
3.1.516. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.tlsConfig.cert.secret	677
3.1.517. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.tlsConfig.keySecret	678
3.1.518. .spec.receivers[].webhookConfigs[].httpConfig.proxyConnectHeader	678
3.1.519. .spec.receivers[].webhookConfigs[].httpConfig.proxyConnectHeader{}	679
3.1.520. .spec.receivers[].webhookConfigs[].httpConfig.proxyConnectHeader{}	679
3.1.521. .spec.receivers[].webhookConfigs[].httpConfig.tlsConfig	679
3.1.522. .spec.receivers[].webhookConfigs[].httpConfig.tlsConfig.ca	680
3.1.523. .spec.receivers[].webhookConfigs[].httpConfig.tlsConfig.ca.configMap	680
3.1.524. .spec.receivers[].webhookConfigs[].httpConfig.tlsConfig.ca.secret	681
3.1.525. .spec.receivers[].webhookConfigs[].httpConfig.tlsConfig.cert	682
3.1.526. .spec.receivers[].webhookConfigs[].httpConfig.tlsConfig.cert.configMap	682
3.1.527. .spec.receivers[].webhookConfigs[].httpConfig.tlsConfig.cert.secret	683
3.1.528. .spec.receivers[].webhookConfigs[].httpConfig.tlsConfig.keySecret	683
3.1.529. .spec.receivers[].webhookConfigs[].urlSecret	684
3.1.530. .spec.receivers[].wechatConfigs	684
3.1.531. .spec.receivers[].wechatConfigs[]	685
3.1.532. .spec.receivers[].wechatConfigs[].apiSecret	685
3.1.533. .spec.receivers[].wechatConfigs[].httpConfig	686
3.1.534. .spec.receivers[].wechatConfigs[].httpConfig.authorization	687
3.1.535. .spec.receivers[].wechatConfigs[].httpConfig.authorization.credentials	688
3.1.536. .spec.receivers[].wechatConfigs[].httpConfig.basicAuth	688

3.1.537. .spec.receivers[].wechatConfigs[].httpConfig.basicAuth.password	689
3.1.538. .spec.receivers[].wechatConfigs[].httpConfig.basicAuth.username	689
3.1.539. .spec.receivers[].wechatConfigs[].httpConfig.bearerTokenSecret	690
3.1.540. .spec.receivers[].wechatConfigs[].httpConfig.oauth2	691
3.1.541. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.clientId	692
3.1.542. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.clientId.configMap	692
3.1.543. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.clientId.secret	693
3.1.544. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.clientSecret	694
3.1.545. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.proxyConnectHeader	694
3.1.546. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.proxyConnectHeader{}	695
3.1.547. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.proxyConnectHeader{}	695
3.1.548. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.tlsConfig	695
3.1.549. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.tlsConfig.ca	696
3.1.550. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap	696
3.1.551. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.tlsConfig.ca.secret	697
3.1.552. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.tlsConfig.cert	698
3.1.553. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap	698
3.1.554. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.tlsConfig.cert.secret	699
3.1.555. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.tlsConfig.keySecret	699
3.1.556. .spec.receivers[].wechatConfigs[].httpConfig.proxyConnectHeader	700
3.1.557. .spec.receivers[].wechatConfigs[].httpConfig.proxyConnectHeader{}	700
3.1.558. .spec.receivers[].wechatConfigs[].httpConfig.proxyConnectHeader{}	700
3.1.559. .spec.receivers[].wechatConfigs[].httpConfig.tlsConfig	701
3.1.560. .spec.receivers[].wechatConfigs[].httpConfig.tlsConfig.ca	702
3.1.561. .spec.receivers[].wechatConfigs[].httpConfig.tlsConfig.ca.configMap	702
3.1.562. .spec.receivers[].wechatConfigs[].httpConfig.tlsConfig.ca.secret	703
3.1.563. .spec.receivers[].wechatConfigs[].httpConfig.tlsConfig.cert	703
3.1.564. .spec.receivers[].wechatConfigs[].httpConfig.tlsConfig.cert.configMap	703
3.1.565. .spec.receivers[].wechatConfigs[].httpConfig.tlsConfig.cert.secret	704
3.1.566. .spec.receivers[].wechatConfigs[].httpConfig.tlsConfig.keySecret	705
3.1.567. .spec.route	705
3.1.568. .spec.route.matchers	707
3.1.569. .spec.route.matchers[]	707
3.1.570. .spec.timeIntervals	708
3.1.571. .spec.timeIntervals[]	708
3.1.572. .spec.timeIntervals[].timeIntervals	708
3.1.573. .spec.timeIntervals[].timeIntervals[]	709
3.1.574. .spec.timeIntervals[].timeIntervals[].daysOfMonth	709
3.1.575. .spec.timeIntervals[].timeIntervals[].daysOfMonth[]	709
3.1.576. .spec.timeIntervals[].timeIntervals[].times	710
3.1.577. .spec.timeIntervals[].timeIntervals[].times[]	710
3.2. API ENDPOINTS	710
3.2.1. /apis/monitoring.coreos.com/v1beta1/alertmanagerconfigs	711
3.2.2. /apis/monitoring.coreos.com/v1beta1/namespaces/{namespace}/alertmanagerconfigs	711
3.2.3. /apis/monitoring.coreos.com/v1beta1/namespaces/{namespace}/alertmanagerconfigs/{name}	713
CHAPTER 4. ALERTRELABELCONFIG [MONITORING.OPENSIFT.IO/V1]	717
4.1. SPECIFICATION	717
4.1.1. .spec	718
4.1.2. .spec.configs	718
4.1.3. .spec.configs[]	718
4.1.4. .status	720
4.1.5. .status.conditions	720

4.1.6. .status.conditions[]	720
4.2. API ENDPOINTS	721
4.2.1. /apis/monitoring.openshift.io/v1/alertrelabelconfigs	722
4.2.2. /apis/monitoring.openshift.io/v1/namespaces/{namespace}/alertrelabelconfigs	722
4.2.3. /apis/monitoring.openshift.io/v1/namespaces/{namespace}/alertrelabelconfigs/{name}	724
4.2.4. /apis/monitoring.openshift.io/v1/namespaces/{namespace}/alertrelabelconfigs/{name}/status	727
CHAPTER 5. ALERTINGRULE [MONITORING.OPENSIFT.IO/V1]	731
5.1. SPECIFICATION	731
5.1.1. .spec	732
5.1.2. .spec.groups	733
5.1.3. .spec.groups[]	734
5.1.4. .spec.groups[].rules	734
5.1.5. .spec.groups[].rules[]	735
5.1.6. .status	736
5.1.7. .status.prometheusRule	736
5.2. API ENDPOINTS	737
5.2.1. /apis/monitoring.openshift.io/v1/alertingrules	737
5.2.2. /apis/monitoring.openshift.io/v1/namespaces/{namespace}/alertingrules	738
5.2.3. /apis/monitoring.openshift.io/v1/namespaces/{namespace}/alertingrules/{name}	739
5.2.4. /apis/monitoring.openshift.io/v1/namespaces/{namespace}/alertingrules/{name}/status	742
CHAPTER 6. PODMONITOR [MONITORING.COREOS.COM/V1]	746
6.1. SPECIFICATION	746
6.1.1. .spec	747
6.1.2. .spec.attachMetadata	750
6.1.3. .spec.namespaceSelector	751
6.1.4. .spec.podMetricsEndpoints	751
6.1.5. .spec.podMetricsEndpoints[]	751
6.1.6. .spec.podMetricsEndpoints[].authorization	756
6.1.7. .spec.podMetricsEndpoints[].authorization.credentials	756
6.1.8. .spec.podMetricsEndpoints[].basicAuth	757
6.1.9. .spec.podMetricsEndpoints[].basicAuth.password	757
6.1.10. .spec.podMetricsEndpoints[].basicAuth.username	758
6.1.11. .spec.podMetricsEndpoints[].bearerTokenSecret	759
6.1.12. .spec.podMetricsEndpoints[].metricRelabelings	759
6.1.13. .spec.podMetricsEndpoints[].metricRelabelings[]	760
6.1.14. .spec.podMetricsEndpoints[].oauth2	761
6.1.15. .spec.podMetricsEndpoints[].oauth2.clientId	763
6.1.16. .spec.podMetricsEndpoints[].oauth2.clientId.configMap	763
6.1.17. .spec.podMetricsEndpoints[].oauth2.clientId.secret	764
6.1.18. .spec.podMetricsEndpoints[].oauth2.clientSecret	764
6.1.19. .spec.podMetricsEndpoints[].oauth2.proxyConnectHeader	765
6.1.20. .spec.podMetricsEndpoints[].oauth2.proxyConnectHeader{}	765
6.1.21. .spec.podMetricsEndpoints[].oauth2.proxyConnectHeader{[]}	765
6.1.22. .spec.podMetricsEndpoints[].oauth2.tlsConfig	766
6.1.23. .spec.podMetricsEndpoints[].oauth2.tlsConfig.ca	767
6.1.24. .spec.podMetricsEndpoints[].oauth2.tlsConfig.ca.configMap	767
6.1.25. .spec.podMetricsEndpoints[].oauth2.tlsConfig.ca.secret	768
6.1.26. .spec.podMetricsEndpoints[].oauth2.tlsConfig.cert	768
6.1.27. .spec.podMetricsEndpoints[].oauth2.tlsConfig.cert.configMap	768
6.1.28. .spec.podMetricsEndpoints[].oauth2.tlsConfig.cert.secret	769
6.1.29. .spec.podMetricsEndpoints[].oauth2.tlsConfig.keySecret	770

6.1.30. .spec.podMetricsEndpoints[].params	770
6.1.31. .spec.podMetricsEndpoints[].proxyConnectHeader	770
6.1.32. .spec.podMetricsEndpoints[].proxyConnectHeader{}	771
6.1.33. .spec.podMetricsEndpoints[].proxyConnectHeader{}	771
6.1.34. .spec.podMetricsEndpoints[].relabelings	771
6.1.35. .spec.podMetricsEndpoints[].relabelings[]	772
6.1.36. .spec.podMetricsEndpoints[].tlsConfig	773
6.1.37. .spec.podMetricsEndpoints[].tlsConfig.ca	774
6.1.38. .spec.podMetricsEndpoints[].tlsConfig.ca.configMap	774
6.1.39. .spec.podMetricsEndpoints[].tlsConfig.ca.secret	775
6.1.40. .spec.podMetricsEndpoints[].tlsConfig.cert	775
6.1.41. .spec.podMetricsEndpoints[].tlsConfig.cert.configMap	776
6.1.42. .spec.podMetricsEndpoints[].tlsConfig.cert.secret	776
6.1.43. .spec.podMetricsEndpoints[].tlsConfig.keySecret	777
6.1.44. .spec.selector	777
6.1.45. .spec.selector.matchExpressions	778
6.1.46. .spec.selector.matchExpressions[]	778
6.2. API ENDPOINTS	779
6.2.1. /apis/monitoring.coreos.com/v1/podmonitors	779
6.2.2. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/podmonitors	780
6.2.3. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/podmonitors/{name}	781
CHAPTER 7. PROBE [MONITORING.COREOS.COM/V1]	785
7.1. SPECIFICATION	785
7.1.1. .spec	786
7.1.2. .spec.authorization	789
7.1.3. .spec.authorization.credentials	790
7.1.4. .spec.basicAuth	790
7.1.5. .spec.basicAuth.password	791
7.1.6. .spec.basicAuth.username	791
7.1.7. .spec.bearerTokenSecret	792
7.1.8. .spec.metricRelabelings	793
7.1.9. .spec.metricRelabelings[]	793
7.1.10. .spec.oauth2	794
7.1.11. .spec.oauth2.clientId	796
7.1.12. .spec.oauth2.clientId.configMap	796
7.1.13. .spec.oauth2.clientId.secret	797
7.1.14. .spec.oauth2.clientSecret	798
7.1.15. .spec.oauth2.proxyConnectHeader	798
7.1.16. .spec.oauth2.proxyConnectHeader{}	798
7.1.17. .spec.oauth2.proxyConnectHeader{}	798
7.1.18. .spec.oauth2.tlsConfig	799
7.1.19. .spec.oauth2.tlsConfig.ca	800
7.1.20. .spec.oauth2.tlsConfig.ca.configMap	800
7.1.21. .spec.oauth2.tlsConfig.ca.secret	801
7.1.22. .spec.oauth2.tlsConfig.cert	801
7.1.23. .spec.oauth2.tlsConfig.cert.configMap	802
7.1.24. .spec.oauth2.tlsConfig.cert.secret	802
7.1.25. .spec.oauth2.tlsConfig.keySecret	803
7.1.26. .spec.params	803
7.1.27. .spec.params[]	804
7.1.28. .spec.prober	804
7.1.29. .spec.prober.proxyConnectHeader	805

7.1.30. .spec.prober.proxyConnectHeader{}	806
7.1.31. .spec.prober.proxyConnectHeader{[]}[]	806
7.1.32. .spec.targets	806
7.1.33. .spec.targets.ingress	807
7.1.34. .spec.targets.ingress.namespaceSelector	808
7.1.35. .spec.targets.ingress.relabelingConfigs	808
7.1.36. .spec.targets.ingress.relabelingConfigs[]	808
7.1.37. .spec.targets.ingress.selector	810
7.1.38. .spec.targets.ingress.selector.matchExpressions	810
7.1.39. .spec.targets.ingress.selector.matchExpressions[]	811
7.1.40. .spec.targets.staticConfig	811
7.1.41. .spec.targets.staticConfig.relabelingConfigs	812
7.1.42. .spec.targets.staticConfig.relabelingConfigs[]	812
7.1.43. .spec.tlsConfig	813
7.1.44. .spec.tlsConfig.ca	814
7.1.45. .spec.tlsConfig.ca.configMap	814
7.1.46. .spec.tlsConfig.ca.secret	815
7.1.47. .spec.tlsConfig.cert	816
7.1.48. .spec.tlsConfig.cert.configMap	816
7.1.49. .spec.tlsConfig.cert.secret	817
7.1.50. .spec.tlsConfig.keySecret	817
7.2. API ENDPOINTS	818
7.2.1. /apis/monitoring.coreos.com/v1/probes	818
7.2.2. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/probes	819
7.2.3. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/probes/{name}	820
CHAPTER 8. PROMETHEUS [MONITORING.COREOS.COM/V1]	824
8.1. SPECIFICATION	824
8.1.1. .spec	825
8.1.2. .spec.additionalAlertManagerConfigs	863
8.1.3. .spec.additionalAlertRelabelConfigs	864
8.1.4. .spec.additionalArgs	864
8.1.5. .spec.additionalArgs[]	865
8.1.6. .spec.additionalScrapeConfigs	865
8.1.7. .spec.affinity	866
8.1.8. .spec.affinity.nodeAffinity	866
8.1.9. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution	867
8.1.10. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[]	868
8.1.11. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference	868
8.1.12. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchExpressions	869
8.1.13. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchExpressions	869
8.1.14. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchFields	870
8.1.15. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchFields[]	870
8.1.16. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution	871
8.1.17. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms	871
8.1.18. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[]	871
8.1.19. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matchExpressions	872
8.1.20. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matchFields	872

8.1.21. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].match	873
8.1.22. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matcl	873
8.1.23. .spec.affinity.podAffinity	874
8.1.24. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution	875
8.1.25. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]	875
8.1.26. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm	876
8.1.27. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSele	878
8.1.28. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSele	879
8.1.29. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSele	879
8.1.30. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespa	880
8.1.31. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespa	880
8.1.32. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespa	881
8.1.33. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution	881
8.1.34. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[]	881
8.1.35. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector	884
8.1.36. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExpres	884
8.1.37. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExpres	885
8.1.38. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector	885
8.1.39. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.match	886
8.1.40. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.match	886
8.1.41. .spec.affinity.podAntiAffinity	887
8.1.42. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution	888
8.1.43. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[]	888
8.1.44. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm	889
8.1.45. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.label	891
8.1.46. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labe	892
8.1.47. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.label	892
8.1.48. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.nam	893
8.1.49. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.nam	893
8.1.50. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.nam	894
8.1.51. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution	894
8.1.52. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[]	894
8.1.53. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector	897
8.1.54. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchEx	897
8.1.55. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchEx	

	898
8.1.56. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector	898
8.1.57. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.m	899
8.1.58. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.m	899
8.1.59. .spec.alerting	900
8.1.60. .spec.alerting.alertmanagers	900
8.1.61. .spec.alerting.alertmanagers[]	900
8.1.62. .spec.alerting.alertmanagers[].alertRelabelings	903
8.1.63. .spec.alerting.alertmanagers[].alertRelabelings[]	904
8.1.64. .spec.alerting.alertmanagers[].authorization	905
8.1.65. .spec.alerting.alertmanagers[].authorization.credentials	905
8.1.66. .spec.alerting.alertmanagers[].basicAuth	906
8.1.67. .spec.alerting.alertmanagers[].basicAuth.password	906
8.1.68. .spec.alerting.alertmanagers[].basicAuth.username	907
8.1.69. .spec.alerting.alertmanagers[].proxyConnectHeader	908
8.1.70. .spec.alerting.alertmanagers[].proxyConnectHeader{}	908
8.1.71. .spec.alerting.alertmanagers[].proxyConnectHeader{[]{}	908
8.1.72. .spec.alerting.alertmanagers[].relabelings	908
8.1.73. .spec.alerting.alertmanagers[].relabelings[]	909
8.1.74. .spec.alerting.alertmanagers[].sigv4	910
8.1.75. .spec.alerting.alertmanagers[].sigv4.accessKey	911
8.1.76. .spec.alerting.alertmanagers[].sigv4.secretKey	911
8.1.77. .spec.alerting.alertmanagers[].tlsConfig	912
8.1.78. .spec.alerting.alertmanagers[].tlsConfig.ca	913
8.1.79. .spec.alerting.alertmanagers[].tlsConfig.ca.configMap	913
8.1.80. .spec.alerting.alertmanagers[].tlsConfig.ca.secret	914
8.1.81. .spec.alerting.alertmanagers[].tlsConfig.cert	914
8.1.82. .spec.alerting.alertmanagers[].tlsConfig.cert.configMap	915
8.1.83. .spec.alerting.alertmanagers[].tlsConfig.cert.secret	915
8.1.84. .spec.alerting.alertmanagers[].tlsConfig.keySecret	916
8.1.85. .spec.apiserverConfig	917
8.1.86. .spec.apiserverConfig.authorization	918
8.1.87. .spec.apiserverConfig.authorization.credentials	919
8.1.88. .spec.apiserverConfig.basicAuth	920
8.1.89. .spec.apiserverConfig.basicAuth.password	920
8.1.90. .spec.apiserverConfig.basicAuth.username	921
8.1.91. .spec.apiserverConfig.proxyConnectHeader	921
8.1.92. .spec.apiserverConfig.proxyConnectHeader{}	922
8.1.93. .spec.apiserverConfig.proxyConnectHeader{[]{}	922
8.1.94. .spec.apiserverConfig.tlsConfig	922
8.1.95. .spec.apiserverConfig.tlsConfig.ca	923
8.1.96. .spec.apiserverConfig.tlsConfig.ca.configMap	924
8.1.97. .spec.apiserverConfig.tlsConfig.ca.secret	924
8.1.98. .spec.apiserverConfig.tlsConfig.cert	925
8.1.99. .spec.apiserverConfig.tlsConfig.cert.configMap	925
8.1.100. .spec.apiserverConfig.tlsConfig.cert.secret	926
8.1.101. .spec.apiserverConfig.tlsConfig.keySecret	926
8.1.102. .spec.arbitraryFSAccessThroughSMs	927
8.1.103. .spec.containers	927
8.1.104. .spec.containers[]	928

8.1.105. .spec.containers[].env	935
8.1.106. .spec.containers[].env[]	935
8.1.107. .spec.containers[].env[].valueFrom	936
8.1.108. .spec.containers[].env[].valueFrom.configMapKeyRef	937
8.1.109. .spec.containers[].env[].valueFrom.fieldRef	937
8.1.110. .spec.containers[].env[].valueFrom.resourceFieldRef	938
8.1.111. .spec.containers[].env[].valueFrom.secretKeyRef	938
8.1.112. .spec.containers[].envFrom	939
8.1.113. .spec.containers[].envFrom[]	939
8.1.114. .spec.containers[].envFrom[].configMapRef	940
8.1.115. .spec.containers[].envFrom[].secretRef	940
8.1.116. .spec.containers[].lifecycle	940
8.1.117. .spec.containers[].lifecycle.postStart	942
8.1.118. .spec.containers[].lifecycle.postStart.exec	942
8.1.119. .spec.containers[].lifecycle.postStart.httpGet	943
8.1.120. .spec.containers[].lifecycle.postStart.httpGet.httpHeaders	944
8.1.121. .spec.containers[].lifecycle.postStart.httpGet.httpHeaders[]	944
8.1.122. .spec.containers[].lifecycle.postStart.sleep	944
8.1.123. .spec.containers[].lifecycle.postStart.tcpSocket	945
8.1.124. .spec.containers[].lifecycle.preStop	945
8.1.125. .spec.containers[].lifecycle.preStop.exec	946
8.1.126. .spec.containers[].lifecycle.preStop.httpGet	946
8.1.127. .spec.containers[].lifecycle.preStop.httpGet.httpHeaders	947
8.1.128. .spec.containers[].lifecycle.preStop.httpGet.httpHeaders[]	947
8.1.129. .spec.containers[].lifecycle.preStop.sleep	948
8.1.130. .spec.containers[].lifecycle.preStop.tcpSocket	948
8.1.131. .spec.containers[].livenessProbe	949
8.1.132. .spec.containers[].livenessProbe.exec	950
8.1.133. .spec.containers[].livenessProbe.grpc	951
8.1.134. .spec.containers[].livenessProbe.httpGet	951
8.1.135. .spec.containers[].livenessProbe.httpGet.httpHeaders	952
8.1.136. .spec.containers[].livenessProbe.httpGet.httpHeaders[]	952
8.1.137. .spec.containers[].livenessProbe.tcpSocket	953
8.1.138. .spec.containers[].ports	953
8.1.139. .spec.containers[].ports[]	953
8.1.140. .spec.containers[].readinessProbe	954
8.1.141. .spec.containers[].readinessProbe.exec	956
8.1.142. .spec.containers[].readinessProbe.grpc	957
8.1.143. .spec.containers[].readinessProbe.httpGet	957
8.1.144. .spec.containers[].readinessProbe.httpGet.httpHeaders	958
8.1.145. .spec.containers[].readinessProbe.httpGet.httpHeaders[]	958
8.1.146. .spec.containers[].readinessProbe.tcpSocket	959
8.1.147. .spec.containers[].resizePolicy	959
8.1.148. .spec.containers[].resizePolicy[]	959
8.1.149. .spec.containers[].resources	960
8.1.150. .spec.containers[].resources.claims	961
8.1.151. .spec.containers[].resources.claims[]	961
8.1.152. .spec.containers[].securityContext	962
8.1.153. .spec.containers[].securityContext.appArmorProfile	964
8.1.154. .spec.containers[].securityContext.capabilities	965
8.1.155. .spec.containers[].securityContext.seLinuxOptions	965
8.1.156. .spec.containers[].securityContext.seccompProfile	966
8.1.157. .spec.containers[].securityContext.windowsOptions	967

8.1.158. .spec.containers[].startupProbe	968
8.1.159. .spec.containers[].startupProbe.exec	969
8.1.160. .spec.containers[].startupProbe.grpc	970
8.1.161. .spec.containers[].startupProbe.httpGet	970
8.1.162. .spec.containers[].startupProbe.httpGet.httpHeaders	971
8.1.163. .spec.containers[].startupProbe.httpGet.httpHeaders[]	971
8.1.164. .spec.containers[].startupProbe.tcpSocket	972
8.1.165. .spec.containers[].volumeDevices	972
8.1.166. .spec.containers[].volumeDevices[]	972
8.1.167. .spec.containers[].volumeMounts	973
8.1.168. .spec.containers[].volumeMounts[]	973
8.1.169. .spec.dnsConfig	975
8.1.170. .spec.dnsConfig.options	975
8.1.171. .spec.dnsConfig.options[]	976
8.1.172. .spec.excludedFromEnforcement	976
8.1.173. .spec.excludedFromEnforcement[]	976
8.1.174. .spec.exemplars	977
8.1.175. .spec.hostAliases	977
8.1.176. .spec.hostAliases[]	978
8.1.177. .spec.imagePullSecrets	978
8.1.178. .spec.imagePullSecrets[]	978
8.1.179. .spec.initContainers	979
8.1.180. .spec.initContainers[]	979
8.1.181. .spec.initContainers[].env	986
8.1.182. .spec.initContainers[].env[]	986
8.1.183. .spec.initContainers[].env[].valueFrom	987
8.1.184. .spec.initContainers[].env[].valueFrom.configMapKeyRef	988
8.1.185. .spec.initContainers[].env[].valueFrom.fieldRef	988
8.1.186. .spec.initContainers[].env[].valueFrom.resourceFieldRef	989
8.1.187. .spec.initContainers[].env[].valueFrom.secretKeyRef	989
8.1.188. .spec.initContainers[].envFrom	990
8.1.189. .spec.initContainers[].envFrom[]	990
8.1.190. .spec.initContainers[].envFrom[].configMapRef	991
8.1.191. .spec.initContainers[].envFrom[].secretRef	991
8.1.192. .spec.initContainers[].lifecycle	991
8.1.193. .spec.initContainers[].lifecycle.postStart	993
8.1.194. .spec.initContainers[].lifecycle.postStart.exec	993
8.1.195. .spec.initContainers[].lifecycle.postStart.httpGet	994
8.1.196. .spec.initContainers[].lifecycle.postStart.httpGet.httpHeaders	995
8.1.197. .spec.initContainers[].lifecycle.postStart.httpGet.httpHeaders[]	995
8.1.198. .spec.initContainers[].lifecycle.postStart.sleep	995
8.1.199. .spec.initContainers[].lifecycle.postStart.tcpSocket	996
8.1.200. .spec.initContainers[].lifecycle.preStop	996
8.1.201. .spec.initContainers[].lifecycle.preStop.exec	997
8.1.202. .spec.initContainers[].lifecycle.preStop.httpGet	997
8.1.203. .spec.initContainers[].lifecycle.preStop.httpGet.httpHeaders	998
8.1.204. .spec.initContainers[].lifecycle.preStop.httpGet.httpHeaders[]	998
8.1.205. .spec.initContainers[].lifecycle.preStop.sleep	999
8.1.206. .spec.initContainers[].lifecycle.preStop.tcpSocket	999
8.1.207. .spec.initContainers[].livenessProbe	1000
8.1.208. .spec.initContainers[].livenessProbe.exec	1001
8.1.209. .spec.initContainers[].livenessProbe.grpc	1002
8.1.210. .spec.initContainers[].livenessProbe.httpGet	1002

8.1.211. .spec.initContainers[].livenessProbe.httpGet.httpHeaders	1003
8.1.212. .spec.initContainers[].livenessProbe.httpGet.httpHeaders[]	1003
8.1.213. .spec.initContainers[].livenessProbe.tcpSocket	1004
8.1.214. .spec.initContainers[].ports	1004
8.1.215. .spec.initContainers[].ports[]	1004
8.1.216. .spec.initContainers[].readinessProbe	1005
8.1.217. .spec.initContainers[].readinessProbe.exec	1007
8.1.218. .spec.initContainers[].readinessProbe.grpc	1008
8.1.219. .spec.initContainers[].readinessProbe.httpGet	1008
8.1.220. .spec.initContainers[].readinessProbe.httpGet.httpHeaders	1009
8.1.221. .spec.initContainers[].readinessProbe.httpGet.httpHeaders[]	1009
8.1.222. .spec.initContainers[].readinessProbe.tcpSocket	1010
8.1.223. .spec.initContainers[].resizePolicy	1010
8.1.224. .spec.initContainers[].resizePolicy[]	1010
8.1.225. .spec.initContainers[].resources	1011
8.1.226. .spec.initContainers[].resources.claims	1012
8.1.227. .spec.initContainers[].resources.claims[]	1012
8.1.228. .spec.initContainers[].securityContext	1013
8.1.229. .spec.initContainers[].securityContext.appArmorProfile	1015
8.1.230. .spec.initContainers[].securityContext.capabilities	1016
8.1.231. .spec.initContainers[].securityContext.seLinuxOptions	1016
8.1.232. .spec.initContainers[].securityContext.seccompProfile	1017
8.1.233. .spec.initContainers[].securityContext.windowsOptions	1018
8.1.234. .spec.initContainers[].startupProbe	1019
8.1.235. .spec.initContainers[].startupProbe.exec	1020
8.1.236. .spec.initContainers[].startupProbe.grpc	1021
8.1.237. .spec.initContainers[].startupProbe.httpGet	1021
8.1.238. .spec.initContainers[].startupProbe.httpGet.httpHeaders	1022
8.1.239. .spec.initContainers[].startupProbe.httpGet.httpHeaders[]	1022
8.1.240. .spec.initContainers[].startupProbe.tcpSocket	1023
8.1.241. .spec.initContainers[].volumeDevices	1023
8.1.242. .spec.initContainers[].volumeDevices[]	1023
8.1.243. .spec.initContainers[].volumeMounts	1024
8.1.244. .spec.initContainers[].volumeMounts[]	1024
8.1.245. .spec.otlp	1026
8.1.246. .spec.persistentVolumeClaimRetentionPolicy	1027
8.1.247. .spec.podMetadata	1028
8.1.248. .spec.podMonitorNamespaceSelector	1029
8.1.249. .spec.podMonitorNamespaceSelector.matchExpressions	1030
8.1.250. .spec.podMonitorNamespaceSelector.matchExpressions[]	1030
8.1.251. .spec.podMonitorSelector	1031
8.1.252. .spec.podMonitorSelector.matchExpressions	1032
8.1.253. .spec.podMonitorSelector.matchExpressions[]	1032
8.1.254. .spec.probeNamespaceSelector	1033
8.1.255. .spec.probeNamespaceSelector.matchExpressions	1033
8.1.256. .spec.probeNamespaceSelector.matchExpressions[]	1034
8.1.257. .spec.probeSelector	1034
8.1.258. .spec.probeSelector.matchExpressions	1035
8.1.259. .spec.probeSelector.matchExpressions[]	1035
8.1.260. .spec.prometheusRulesExcludedFromEnforce	1036
8.1.261. .spec.prometheusRulesExcludedFromEnforce[]	1036
8.1.262. .spec.query	1037
8.1.263. .spec.remoteRead	1037

8.1.264. .spec.remoteRead[]	1037
8.1.265. .spec.remoteRead[].authorization	1040
8.1.266. .spec.remoteRead[].authorization.credentials	1041
8.1.267. .spec.remoteRead[].basicAuth	1041
8.1.268. .spec.remoteRead[].basicAuth.password	1042
8.1.269. .spec.remoteRead[].basicAuth.username	1042
8.1.270. .spec.remoteRead[].oauth2	1043
8.1.271. .spec.remoteRead[].oauth2.clientId	1045
8.1.272. .spec.remoteRead[].oauth2.clientId.configMap	1045
8.1.273. .spec.remoteRead[].oauth2.clientId.secret	1046
8.1.274. .spec.remoteRead[].oauth2.clientSecret	1046
8.1.275. .spec.remoteRead[].oauth2.proxyConnectHeader	1047
8.1.276. .spec.remoteRead[].oauth2.proxyConnectHeader{}	1047
8.1.277. .spec.remoteRead[].oauth2.proxyConnectHeader{}{}	1047
8.1.278. .spec.remoteRead[].oauth2.tlsConfig	1048
8.1.279. .spec.remoteRead[].oauth2.tlsConfig.ca	1049
8.1.280. .spec.remoteRead[].oauth2.tlsConfig.ca.configMap	1049
8.1.281. .spec.remoteRead[].oauth2.tlsConfig.ca.secret	1050
8.1.282. .spec.remoteRead[].oauth2.tlsConfig.cert	1050
8.1.283. .spec.remoteRead[].oauth2.tlsConfig.cert.configMap	1051
8.1.284. .spec.remoteRead[].oauth2.tlsConfig.cert.secret	1051
8.1.285. .spec.remoteRead[].oauth2.tlsConfig.keySecret	1052
8.1.286. .spec.remoteRead[].proxyConnectHeader	1052
8.1.287. .spec.remoteRead[].proxyConnectHeader{}	1053
8.1.288. .spec.remoteRead[].proxyConnectHeader{}{}	1053
8.1.289. .spec.remoteRead[].tlsConfig	1053
8.1.290. .spec.remoteRead[].tlsConfig.ca	1054
8.1.291. .spec.remoteRead[].tlsConfig.ca.configMap	1055
8.1.292. .spec.remoteRead[].tlsConfig.ca.secret	1055
8.1.293. .spec.remoteRead[].tlsConfig.cert	1056
8.1.294. .spec.remoteRead[].tlsConfig.cert.configMap	1056
8.1.295. .spec.remoteRead[].tlsConfig.cert.secret	1057
8.1.296. .spec.remoteRead[].tlsConfig.keySecret	1057
8.1.297. .spec.remoteWrite	1058
8.1.298. .spec.remoteWrite[]	1058
8.1.299. .spec.remoteWrite[].authorization	1063
8.1.300. .spec.remoteWrite[].authorization.credentials	1064
8.1.301. .spec.remoteWrite[].azureAd	1064
8.1.302. .spec.remoteWrite[].azureAd.managedIdentity	1065
8.1.303. .spec.remoteWrite[].azureAd.oauth	1066
8.1.304. .spec.remoteWrite[].azureAd.oauth.clientSecret	1066
8.1.305. .spec.remoteWrite[].azureAd.sdk	1067
8.1.306. .spec.remoteWrite[].basicAuth	1067
8.1.307. .spec.remoteWrite[].basicAuth.password	1068
8.1.308. .spec.remoteWrite[].basicAuth.username	1068
8.1.309. .spec.remoteWrite[].metadataConfig	1069
8.1.310. .spec.remoteWrite[].oauth2	1069
8.1.311. .spec.remoteWrite[].oauth2.clientId	1071
8.1.312. .spec.remoteWrite[].oauth2.clientId.configMap	1071
8.1.313. .spec.remoteWrite[].oauth2.clientId.secret	1072
8.1.314. .spec.remoteWrite[].oauth2.clientSecret	1073
8.1.315. .spec.remoteWrite[].oauth2.proxyConnectHeader	1073
8.1.316. .spec.remoteWrite[].oauth2.proxyConnectHeader{}	1074

8.1.317. .spec.remoteWrite[].oauth2.proxyConnectHeader{}	1074
8.1.318. .spec.remoteWrite[].oauth2.tlsConfig	1074
8.1.319. .spec.remoteWrite[].oauth2.tlsConfig.ca	1075
8.1.320. .spec.remoteWrite[].oauth2.tlsConfig.ca.configMap	1075
8.1.321. .spec.remoteWrite[].oauth2.tlsConfig.ca.secret	1076
8.1.322. .spec.remoteWrite[].oauth2.tlsConfig.cert	1077
8.1.323. .spec.remoteWrite[].oauth2.tlsConfig.cert.configMap	1077
8.1.324. .spec.remoteWrite[].oauth2.tlsConfig.cert.secret	1078
8.1.325. .spec.remoteWrite[].oauth2.tlsConfig.keySecret	1078
8.1.326. .spec.remoteWrite[].proxyConnectHeader	1079
8.1.327. .spec.remoteWrite[].proxyConnectHeader{}	1079
8.1.328. .spec.remoteWrite[].proxyConnectHeader{}	1079
8.1.329. .spec.remoteWrite[].queueConfig	1080
8.1.330. .spec.remoteWrite[].sigv4	1081
8.1.331. .spec.remoteWrite[].sigv4.accessKey	1082
8.1.332. .spec.remoteWrite[].sigv4.secretKey	1083
8.1.333. .spec.remoteWrite[].tlsConfig	1083
8.1.334. .spec.remoteWrite[].tlsConfig.ca	1084
8.1.335. .spec.remoteWrite[].tlsConfig.ca.configMap	1084
8.1.336. .spec.remoteWrite[].tlsConfig.ca.secret	1085
8.1.337. .spec.remoteWrite[].tlsConfig.cert	1086
8.1.338. .spec.remoteWrite[].tlsConfig.cert.configMap	1086
8.1.339. .spec.remoteWrite[].tlsConfig.cert.secret	1087
8.1.340. .spec.remoteWrite[].tlsConfig.keySecret	1087
8.1.341. .spec.remoteWrite[].writeRelabelConfigs	1088
8.1.342. .spec.remoteWrite[].writeRelabelConfigs[]	1088
8.1.343. .spec.resources	1089
8.1.344. .spec.resources.claims	1090
8.1.345. .spec.resources.claims[]	1091
8.1.346. .spec.ruleNamespaceSelector	1091
8.1.347. .spec.ruleNamespaceSelector.matchExpressions	1092
8.1.348. .spec.ruleNamespaceSelector.matchExpressions[]	1092
8.1.349. .spec.ruleSelector	1093
8.1.350. .spec.ruleSelector.matchExpressions	1093
8.1.351. .spec.ruleSelector.matchExpressions[]	1093
8.1.352. .spec.rules	1094
8.1.353. .spec.rules.alert	1094
8.1.354. .spec.runtime	1095
8.1.355. .spec.scrapeClasses	1095
8.1.356. .spec.scrapeClasses[]	1096
8.1.357. .spec.scrapeClasses[].attachMetadata	1098
8.1.358. .spec.scrapeClasses[].authorization	1099
8.1.359. .spec.scrapeClasses[].authorization.credentials	1099
8.1.360. .spec.scrapeClasses[].metricRelabelings	1100
8.1.361. .spec.scrapeClasses[].metricRelabelings[]	1100
8.1.362. .spec.scrapeClasses[].relabelings	1102
8.1.363. .spec.scrapeClasses[].relabelings[]	1102
8.1.364. .spec.scrapeClasses[].tlsConfig	1103
8.1.365. .spec.scrapeClasses[].tlsConfig.ca	1104
8.1.366. .spec.scrapeClasses[].tlsConfig.ca.configMap	1105
8.1.367. .spec.scrapeClasses[].tlsConfig.ca.secret	1105
8.1.368. .spec.scrapeClasses[].tlsConfig.cert	1106
8.1.369. .spec.scrapeClasses[].tlsConfig.cert.configMap	1106

8.1.370. .spec.scrapeClasses[].tlsConfig.cert.secret	1107
8.1.371. .spec.scrapeClasses[].tlsConfig.keySecret	1107
8.1.372. .spec.scrapeConfigNamespaceSelector	1108
8.1.373. .spec.scrapeConfigNamespaceSelector.matchExpressions	1109
8.1.374. .spec.scrapeConfigNamespaceSelector.matchExpressions[]	1109
8.1.375. .spec.scrapeConfigSelector	1110
8.1.376. .spec.scrapeConfigSelector.matchExpressions	1111
8.1.377. .spec.scrapeConfigSelector.matchExpressions[]	1111
8.1.378. .spec.securityContext	1111
8.1.379. .spec.securityContext.appArmorProfile	1116
8.1.380. .spec.securityContext.seLinuxOptions	1116
8.1.381. .spec.securityContext.seccompProfile	1117
8.1.382. .spec.securityContext.sysctls	1118
8.1.383. .spec.securityContext.sysctls[]	1118
8.1.384. .spec.securityContext.windowsOptions	1118
8.1.385. .spec.serviceMonitorNamespaceSelector	1119
8.1.386. .spec.serviceMonitorNamespaceSelector.matchExpressions	1120
8.1.387. .spec.serviceMonitorNamespaceSelector.matchExpressions[]	1120
8.1.388. .spec.serviceMonitorSelector	1121
8.1.389. .spec.serviceMonitorSelector.matchExpressions	1122
8.1.390. .spec.serviceMonitorSelector.matchExpressions[]	1122
8.1.391. .spec.shardRetentionPolicy	1123
8.1.392. .spec.shardRetentionPolicy.retain	1123
8.1.393. .spec.storage	1124
8.1.394. .spec.storage.emptyDir	1125
8.1.395. .spec.storage.ephemeral	1126
8.1.396. .spec.storage.ephemeral.volumeClaimTemplate	1127
8.1.397. .spec.storage.ephemeral.volumeClaimTemplate.metadata	1128
8.1.398. .spec.storage.ephemeral.volumeClaimTemplate.spec	1128
8.1.399. .spec.storage.ephemeral.volumeClaimTemplate.spec.dataSource	1132
8.1.400. .spec.storage.ephemeral.volumeClaimTemplate.spec.dataSourceRef	1133
8.1.401. .spec.storage.ephemeral.volumeClaimTemplate.spec.resources	1134
8.1.402. .spec.storage.ephemeral.volumeClaimTemplate.spec.selector	1135
8.1.403. .spec.storage.ephemeral.volumeClaimTemplate.spec.selector.matchExpressions	1135
8.1.404. .spec.storage.ephemeral.volumeClaimTemplate.spec.selector.matchExpressions[]	1136
8.1.405. .spec.storage.volumeClaimTemplate	1136
8.1.406. .spec.storage.volumeClaimTemplate.metadata	1137
8.1.407. .spec.storage.volumeClaimTemplate.spec	1138
8.1.408. .spec.storage.volumeClaimTemplate.spec.dataSource	1142
8.1.409. .spec.storage.volumeClaimTemplate.spec.dataSourceRef	1143
8.1.410. .spec.storage.volumeClaimTemplate.spec.resources	1144
8.1.411. .spec.storage.volumeClaimTemplate.spec.selector	1145
8.1.412. .spec.storage.volumeClaimTemplate.spec.selector.matchExpressions	1145
8.1.413. .spec.storage.volumeClaimTemplate.spec.selector.matchExpressions[]	1146
8.1.414. .spec.storage.volumeClaimTemplate.status	1146
8.1.415. .spec.storage.volumeClaimTemplate.status.conditions	1150
8.1.416. .spec.storage.volumeClaimTemplate.status.conditions[]	1150
8.1.417. .spec.storage.volumeClaimTemplate.status.modifyVolumeStatus	1151
8.1.418. .spec.thanos	1152
8.1.419. .spec.thanos.additionalArgs	1157
8.1.420. .spec.thanos.additionalArgs[]	1157
8.1.421. .spec.thanos.grpcServerTlsConfig	1157
8.1.422. .spec.thanos.grpcServerTlsConfig.ca	1158

8.1.423. .spec.thanos.grpcServerTlsConfig.ca.configMap	1159
8.1.424. .spec.thanos.grpcServerTlsConfig.ca.secret	1159
8.1.425. .spec.thanos.grpcServerTlsConfig.cert	1160
8.1.426. .spec.thanos.grpcServerTlsConfig.cert.configMap	1160
8.1.427. .spec.thanos.grpcServerTlsConfig.cert.secret	1161
8.1.428. .spec.thanos.grpcServerTlsConfig.keySecret	1161
8.1.429. .spec.thanos.objectStorageConfig	1162
8.1.430. .spec.thanos.resources	1163
8.1.431. .spec.thanos.resources.claims	1164
8.1.432. .spec.thanos.resources.claims[]	1164
8.1.433. .spec.thanos.tracingConfig	1165
8.1.434. .spec.thanos.volumeMounts	1165
8.1.435. .spec.thanos.volumeMounts[]	1166
8.1.436. .spec.tolerations	1167
8.1.437. .spec.tolerations[]	1168
8.1.438. .spec.topologySpreadConstraints	1169
8.1.439. .spec.topologySpreadConstraints[]	1169
8.1.440. .spec.topologySpreadConstraints[].labelSelector	1174
8.1.441. .spec.topologySpreadConstraints[].labelSelector.matchExpressions	1175
8.1.442. .spec.topologySpreadConstraints[].labelSelector.matchExpressions[]	1175
8.1.443. .spec.tracingConfig	1176
8.1.444. .spec.tracingConfig.tlsConfig	1177
8.1.445. .spec.tracingConfig.tlsConfig.ca	1178
8.1.446. .spec.tracingConfig.tlsConfig.ca.configMap	1178
8.1.447. .spec.tracingConfig.tlsConfig.ca.secret	1179
8.1.448. .spec.tracingConfig.tlsConfig.cert	1179
8.1.449. .spec.tracingConfig.tlsConfig.cert.configMap	1180
8.1.450. .spec.tracingConfig.tlsConfig.cert.secret	1180
8.1.451. .spec.tracingConfig.tlsConfig.keySecret	1181
8.1.452. .spec.tsdb	1181
8.1.453. .spec.volumeMounts	1182
8.1.454. .spec.volumeMounts[]	1182
8.1.455. .spec.volumes	1184
8.1.456. .spec.volumes[]	1185
8.1.457. .spec.volumes[].awsElasticBlockStore	1192
8.1.458. .spec.volumes[].azureDisk	1193
8.1.459. .spec.volumes[].azureFile	1194
8.1.460. .spec.volumes[].cephfs	1195
8.1.461. .spec.volumes[].cephfs.secretRef	1196
8.1.462. .spec.volumes[].cinder	1196
8.1.463. .spec.volumes[].cinder.secretRef	1197
8.1.464. .spec.volumes[].configMap	1198
8.1.465. .spec.volumes[].configMap.items	1199
8.1.466. .spec.volumes[].configMap.items[]	1199
8.1.467. .spec.volumes[].csi	1200
8.1.468. .spec.volumes[].csi.nodePublishSecretRef	1201
8.1.469. .spec.volumes[].downwardAPI	1202
8.1.470. .spec.volumes[].downwardAPI.items	1202
8.1.471. .spec.volumes[].downwardAPI.items[]	1203
8.1.472. .spec.volumes[].downwardAPI.items[].fieldRef	1204
8.1.473. .spec.volumes[].downwardAPI.items[].resourceFieldRef	1204
8.1.474. .spec.volumes[].emptyDir	1204
8.1.475. .spec.volumes[].ephemeral	1205

8.1.476. .spec.volumes[].ephemeral.volumeClaimTemplate	1206
8.1.477. .spec.volumes[].ephemeral.volumeClaimTemplate.metadata	1207
8.1.478. .spec.volumes[].ephemeral.volumeClaimTemplate.spec	1207
8.1.479. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.dataSource	1211
8.1.480. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.dataSourceRef	1212
8.1.481. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.resources	1213
8.1.482. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.selector	1214
8.1.483. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.selector.matchExpressions	1214
8.1.484. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.selector.matchExpressions[]	1215
8.1.485. .spec.volumes[].fc	1215
8.1.486. .spec.volumes[].flexVolume	1216
8.1.487. .spec.volumes[].flexVolume.secretRef	1217
8.1.488. .spec.volumes[].flocker	1217
8.1.489. .spec.volumes[].gcePersistentDisk	1218
8.1.490. .spec.volumes[].gitRepo	1219
8.1.491. .spec.volumes[].glusterfs	1220
8.1.492. .spec.volumes[].hostPath	1221
8.1.493. .spec.volumes[].image	1221
8.1.494. .spec.volumes[].iscsi	1223
8.1.495. .spec.volumes[].iscsi.secretRef	1225
8.1.496. .spec.volumes[].nfs	1225
8.1.497. .spec.volumes[].persistentVolumeClaim	1226
8.1.498. .spec.volumes[].photonPersistentDisk	1226
8.1.499. .spec.volumes[].portworxVolume	1227
8.1.500. .spec.volumes[].projected	1227
8.1.501. .spec.volumes[].projected.sources	1228
8.1.502. .spec.volumes[].projected.sources[]	1228
8.1.503. .spec.volumes[].projected.sources[].clusterTrustBundle	1229
8.1.504. .spec.volumes[].projected.sources[].clusterTrustBundle.labelSelector	1230
8.1.505. .spec.volumes[].projected.sources[].clusterTrustBundle.labelSelector.matchExpressions	1231
8.1.506. .spec.volumes[].projected.sources[].clusterTrustBundle.labelSelector.matchExpressions[]	1231
8.1.507. .spec.volumes[].projected.sources[].configMap	1232
8.1.508. .spec.volumes[].projected.sources[].configMap.items	1233
8.1.509. .spec.volumes[].projected.sources[].configMap.items[]	1233
8.1.510. .spec.volumes[].projected.sources[].downwardAPI	1234
8.1.511. .spec.volumes[].projected.sources[].downwardAPI.items	1234
8.1.512. .spec.volumes[].projected.sources[].downwardAPI.items[]	1234
8.1.513. .spec.volumes[].projected.sources[].downwardAPI.items[].fieldRef	1235
8.1.514. .spec.volumes[].projected.sources[].downwardAPI.items[].resourceFieldRef	1236
8.1.515. .spec.volumes[].projected.sources[].secret	1236
8.1.516. .spec.volumes[].projected.sources[].secret.items	1237
8.1.517. .spec.volumes[].projected.sources[].secret.items[]	1237
8.1.518. .spec.volumes[].projected.sources[].serviceAccountToken	1238
8.1.519. .spec.volumes[].quobyte	1239
8.1.520. .spec.volumes[].rbd	1240
8.1.521. .spec.volumes[].rbd.secretRef	1242
8.1.522. .spec.volumes[].scaleIO	1242
8.1.523. .spec.volumes[].scaleIO.secretRef	1243
8.1.524. .spec.volumes[].secret	1244
8.1.525. .spec.volumes[].secret.items	1245
8.1.526. .spec.volumes[].secret.items[]	1245
8.1.527. .spec.volumes[].storageos	1246
8.1.528. .spec.volumes[].storageos.secretRef	1247

8.1.529. .spec.volumes[].vsphereVolume	1248
8.1.530. .spec.web	1248
8.1.531. .spec.web.httpConfig	1249
8.1.532. .spec.web.httpConfig.headers	1249
8.1.533. .spec.web.tlsConfig	1250
8.1.534. .spec.web.tlsConfig.cert	1253
8.1.535. .spec.web.tlsConfig.cert.configMap	1253
8.1.536. .spec.web.tlsConfig.cert.secret	1254
8.1.537. .spec.web.tlsConfig.client_ca	1254
8.1.538. .spec.web.tlsConfig.client_ca.configMap	1255
8.1.539. .spec.web.tlsConfig.client_ca.secret	1255
8.1.540. .spec.web.tlsConfig.keySecret	1256
8.1.541. .status	1257
8.1.542. .status.conditions	1258
8.1.543. .status.conditions[]	1258
8.1.544. .status.shardStatuses	1259
8.1.545. .status.shardStatuses[]	1260
8.2. API ENDPOINTS	1260
8.2.1. /apis/monitoring.coreos.com/v1/prometheuses	1261
8.2.2. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/prometheuses	1261
8.2.3. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/prometheuses/{name}	1263
8.2.4. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/prometheuses/{name}/scale	1266
8.2.5. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/prometheuses/{name}/status	1269
CHAPTER 9. PROMETHEUSRULE [MONITORING.COREOS.COM/V1]	1272
9.1. SPECIFICATION	1272
9.1.1. .spec	1273
9.1.2. .spec.groups	1273
9.1.3. .spec.groups[]	1273
9.1.4. .spec.groups[].rules	1274
9.1.5. .spec.groups[].rules[]	1275
9.2. API ENDPOINTS	1275
9.2.1. /apis/monitoring.coreos.com/v1/prometheusrules	1276
9.2.2. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/prometheusrules	1276
9.2.3. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/prometheusrules/{name}	1278
CHAPTER 10. SERVICEMONITOR [MONITORING.COREOS.COM/V1]	1282
10.1. SPECIFICATION	1282
10.1.1. .spec	1283
10.1.2. .spec.attachMetadata	1287
10.1.3. .spec.endpoints	1287
10.1.4. .spec.endpoints[]	1288
10.1.5. .spec.endpoints[].authorization	1292
10.1.6. .spec.endpoints[].authorization.credentials	1293
10.1.7. .spec.endpoints[].basicAuth	1293
10.1.8. .spec.endpoints[].basicAuth.password	1294
10.1.9. .spec.endpoints[].basicAuth.username	1294
10.1.10. .spec.endpoints[].bearerTokenSecret	1295
10.1.11. .spec.endpoints[].metricRelabelings	1296
10.1.12. .spec.endpoints[].metricRelabelings[]	1296
10.1.13. .spec.endpoints[].oauth2	1297
10.1.14. .spec.endpoints[].oauth2.clientId	1299
10.1.15. .spec.endpoints[].oauth2.clientId.configMap	1299

10.1.16. .spec.endpoints[].oauth2.clientId.secret	1300
10.1.17. .spec.endpoints[].oauth2.clientSecret	1300
10.1.18. .spec.endpoints[].oauth2.proxyConnectHeader	1301
10.1.19. .spec.endpoints[].oauth2.proxyConnectHeader{}	1301
10.1.20. .spec.endpoints[].oauth2.proxyConnectHeader{}[]	1301
10.1.21. .spec.endpoints[].oauth2.tlsConfig	1302
10.1.22. .spec.endpoints[].oauth2.tlsConfig.ca	1303
10.1.23. .spec.endpoints[].oauth2.tlsConfig.ca.configMap	1303
10.1.24. .spec.endpoints[].oauth2.tlsConfig.ca.secret	1304
10.1.25. .spec.endpoints[].oauth2.tlsConfig.cert	1304
10.1.26. .spec.endpoints[].oauth2.tlsConfig.cert.configMap	1305
10.1.27. .spec.endpoints[].oauth2.tlsConfig.cert.secret	1305
10.1.28. .spec.endpoints[].oauth2.tlsConfig.keySecret	1306
10.1.29. .spec.endpoints[].params	1307
10.1.30. .spec.endpoints[].proxyConnectHeader	1307
10.1.31. .spec.endpoints[].proxyConnectHeader{}	1307
10.1.32. .spec.endpoints[].proxyConnectHeader{}[]	1307
10.1.33. .spec.endpoints[].relabelings	1308
10.1.34. .spec.endpoints[].relabelings[]	1308
10.1.35. .spec.endpoints[].tlsConfig	1309
10.1.36. .spec.endpoints[].tlsConfig.ca	1310
10.1.37. .spec.endpoints[].tlsConfig.ca.configMap	1311
10.1.38. .spec.endpoints[].tlsConfig.ca.secret	1311
10.1.39. .spec.endpoints[].tlsConfig.cert	1312
10.1.40. .spec.endpoints[].tlsConfig.cert.configMap	1312
10.1.41. .spec.endpoints[].tlsConfig.cert.secret	1313
10.1.42. .spec.endpoints[].tlsConfig.keySecret	1313
10.1.43. .spec.namespaceSelector	1314
10.1.44. .spec.selector	1314
10.1.45. .spec.selector.matchExpressions	1315
10.1.46. .spec.selector.matchExpressions[]	1315
10.1.47. .status	1316
10.1.48. .status.bindings	1316
10.1.49. .status.bindings[]	1316
10.1.50. .status.bindings[].conditions	1317
10.1.51. .status.bindings[].conditions[]	1317
10.2. API ENDPOINTS	1318
10.2.1. /apis/monitoring.coreos.com/v1/servicemonitors	1319
10.2.2. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/servicemonitors	1319
10.2.3. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/servicemonitors/{name}	1321
10.2.4. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/servicemonitors/{name}/status	1324
CHAPTER 11. THANOSRULER [MONITORING.COREOS.COM/V1]	1328
11.1. SPECIFICATION	1328
11.1.1. .spec	1329
11.1.2. .spec.additionalArgs	1342
11.1.3. .spec.additionalArgs[]	1342
11.1.4. .spec.affinity	1343
11.1.5. .spec.affinity.nodeAffinity	1343
11.1.6. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution	1344
11.1.7. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[]	1345
11.1.8. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference	1345
11.1.9. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchExpress	

	1346
11.1.10. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchExpres:	1346
11.1.11. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchFields	1347
11.1.12. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchFields[]	1347
11.1.13. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution	1348
11.1.14. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms	1348
11.1.15. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[]	1348
11.1.16. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].match	1349
11.1.17. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].match	1349
11.1.18. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].match	1350
11.1.19. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].match	1350
11.1.20. .spec.affinity.podAffinity	1351
11.1.21. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution	1352
11.1.22. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]	1352
11.1.23. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm	1353
11.1.24. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSele	1355
11.1.25. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSele	1356
11.1.26. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSele	1356
11.1.27. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespa	1357
11.1.28. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespa	1357
11.1.29. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespa	1358
11.1.30. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution	1358
11.1.31. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[]	1358
11.1.32. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector	1361
11.1.33. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExpres	1361
11.1.34. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExpres	1362
11.1.35. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector	1362
11.1.36. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.match	1363
11.1.37. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.match	1363
11.1.38. .spec.affinity.podAntiAffinity	1364
11.1.39. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution	1365
11.1.40. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[]	1365
11.1.41. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm	1366
11.1.42. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.label	1368

11.1.43. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.label	1369
11.1.44. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labe	1369
11.1.45. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.name	1370
11.1.46. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.name	1370
11.1.47. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.name	1371
11.1.48. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution	1371
11.1.49. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[]	1371
11.1.50. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector	1374
11.1.51. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExp	1374
11.1.52. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExp	1375
11.1.53. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector	1375
11.1.54. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.m	1376
11.1.55. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.m	1376
11.1.56. .spec.alertRelabelConfigs	1377
11.1.57. .spec.alertmanagersConfig	1377
11.1.58. .spec.containers	1378
11.1.59. .spec.containers[]	1378
11.1.60. .spec.containers[].env	1386
11.1.61. .spec.containers[].env[]	1386
11.1.62. .spec.containers[].env[].valueFrom	1387
11.1.63. .spec.containers[].env[].valueFrom.configMapKeyRef	1388
11.1.64. .spec.containers[].env[].valueFrom.fieldRef	1388
11.1.65. .spec.containers[].env[].valueFrom.resourceFieldRef	1389
11.1.66. .spec.containers[].env[].valueFrom.secretKeyRef	1389
11.1.67. .spec.containers[].envFrom	1390
11.1.68. .spec.containers[].envFrom[]	1390
11.1.69. .spec.containers[].envFrom[].configMapRef	1391
11.1.70. .spec.containers[].envFrom[].secretRef	1391
11.1.71. .spec.containers[].lifecycle	1391
11.1.72. .spec.containers[].lifecycle.postStart	1393
11.1.73. .spec.containers[].lifecycle.postStart.exec	1393
11.1.74. .spec.containers[].lifecycle.postStart.httpGet	1394
11.1.75. .spec.containers[].lifecycle.postStart.httpGet.httpHeaders	1395
11.1.76. .spec.containers[].lifecycle.postStart.httpGet.httpHeaders[]	1395
11.1.77. .spec.containers[].lifecycle.postStart.sleep	1395
11.1.78. .spec.containers[].lifecycle.postStart.tcpSocket	1396
11.1.79. .spec.containers[].lifecycle.preStop	1396
11.1.80. .spec.containers[].lifecycle.preStop.exec	1397
11.1.81. .spec.containers[].lifecycle.preStop.httpGet	1397
11.1.82. .spec.containers[].lifecycle.preStop.httpGet.httpHeaders	1398
11.1.83. .spec.containers[].lifecycle.preStop.httpGet.httpHeaders[]	1398
11.1.84. .spec.containers[].lifecycle.preStop.sleep	1399
11.1.85. .spec.containers[].lifecycle.preStop.tcpSocket	1399
11.1.86. .spec.containers[].livenessProbe	1400

11.1.87. .spec.containers[].livenessProbe.exec	1401
11.1.88. .spec.containers[].livenessProbe.grpc	1402
11.1.89. .spec.containers[].livenessProbe.httpGet	1402
11.1.90. .spec.containers[].livenessProbe.httpGet.httpHeaders	1403
11.1.91. .spec.containers[].livenessProbe.httpGet.httpHeaders[]	1403
11.1.92. .spec.containers[].livenessProbe.tcpSocket	1404
11.1.93. .spec.containers[].ports	1404
11.1.94. .spec.containers[].ports[]	1404
11.1.95. .spec.containers[].readinessProbe	1405
11.1.96. .spec.containers[].readinessProbe.exec	1407
11.1.97. .spec.containers[].readinessProbe.grpc	1408
11.1.98. .spec.containers[].readinessProbe.httpGet	1408
11.1.99. .spec.containers[].readinessProbe.httpGet.httpHeaders	1409
11.1.100. .spec.containers[].readinessProbe.httpGet.httpHeaders[]	1409
11.1.101. .spec.containers[].readinessProbe.tcpSocket	1410
11.1.102. .spec.containers[].resizePolicy	1410
11.1.103. .spec.containers[].resizePolicy[]	1410
11.1.104. .spec.containers[].resources	1411
11.1.105. .spec.containers[].resources.claims	1412
11.1.106. .spec.containers[].resources.claims[]	1412
11.1.107. .spec.containers[].securityContext	1413
11.1.108. .spec.containers[].securityContext.appArmorProfile	1415
11.1.109. .spec.containers[].securityContext.capabilities	1416
11.1.110. .spec.containers[].securityContext.seLinuxOptions	1416
11.1.111. .spec.containers[].securityContext.seccompProfile	1417
11.1.112. .spec.containers[].securityContext.windowsOptions	1418
11.1.113. .spec.containers[].startupProbe	1419
11.1.114. .spec.containers[].startupProbe.exec	1420
11.1.115. .spec.containers[].startupProbe.grpc	1421
11.1.116. .spec.containers[].startupProbe.httpGet	1421
11.1.117. .spec.containers[].startupProbe.httpGet.httpHeaders	1422
11.1.118. .spec.containers[].startupProbe.httpGet.httpHeaders[]	1422
11.1.119. .spec.containers[].startupProbe.tcpSocket	1423
11.1.120. .spec.containers[].volumeDevices	1423
11.1.121. .spec.containers[].volumeDevices[]	1423
11.1.122. .spec.containers[].volumeMounts	1424
11.1.123. .spec.containers[].volumeMounts[]	1424
11.1.124. .spec.dnsConfig	1426
11.1.125. .spec.dnsConfig.options	1426
11.1.126. .spec.dnsConfig.options[]	1427
11.1.127. .spec.excludedFromEnforcement	1427
11.1.128. .spec.excludedFromEnforcement[]	1427
11.1.129. .spec.grpcServerTlsConfig	1428
11.1.130. .spec.grpcServerTlsConfig.ca	1429
11.1.131. .spec.grpcServerTlsConfig.ca.configMap	1429
11.1.132. .spec.grpcServerTlsConfig.ca.secret	1430
11.1.133. .spec.grpcServerTlsConfig.cert	1431
11.1.134. .spec.grpcServerTlsConfig.cert.configMap	1431
11.1.135. .spec.grpcServerTlsConfig.cert.secret	1431
11.1.136. .spec.grpcServerTlsConfig.keySecret	1432
11.1.137. .spec.hostAliases	1433
11.1.138. .spec.hostAliases[]	1433
11.1.139. .spec.imagePullSecrets	1433

11.1.140. .spec.imagePullSecrets[]	1433
11.1.141. .spec.initContainers	1434
11.1.142. .spec.initContainers[]	1434
11.1.143. .spec.initContainers[].env	1441
11.1.144. .spec.initContainers[].env[]	1441
11.1.145. .spec.initContainers[].env[].valueFrom	1442
11.1.146. .spec.initContainers[].env[].valueFrom.configMapKeyRef	1443
11.1.147. .spec.initContainers[].env[].valueFrom.fieldRef	1443
11.1.148. .spec.initContainers[].env[].valueFrom.resourceFieldRef	1444
11.1.149. .spec.initContainers[].env[].valueFrom.secretKeyRef	1444
11.1.150. .spec.initContainers[].envFrom	1445
11.1.151. .spec.initContainers[].envFrom[]	1445
11.1.152. .spec.initContainers[].envFrom[].configMapRef	1446
11.1.153. .spec.initContainers[].envFrom[].secretRef	1446
11.1.154. .spec.initContainers[].lifecycle	1446
11.1.155. .spec.initContainers[].lifecycle.postStart	1448
11.1.156. .spec.initContainers[].lifecycle.postStart.exec	1448
11.1.157. .spec.initContainers[].lifecycle.postStart.httpGet	1449
11.1.158. .spec.initContainers[].lifecycle.postStart.httpGet.httpHeaders	1450
11.1.159. .spec.initContainers[].lifecycle.postStart.httpGet.httpHeaders[]	1450
11.1.160. .spec.initContainers[].lifecycle.postStart.sleep	1450
11.1.161. .spec.initContainers[].lifecycle.postStart.tcpSocket	1451
11.1.162. .spec.initContainers[].lifecycle.preStop	1451
11.1.163. .spec.initContainers[].lifecycle.preStop.exec	1452
11.1.164. .spec.initContainers[].lifecycle.preStop.httpGet	1452
11.1.165. .spec.initContainers[].lifecycle.preStop.httpGet.httpHeaders	1453
11.1.166. .spec.initContainers[].lifecycle.preStop.httpGet.httpHeaders[]	1453
11.1.167. .spec.initContainers[].lifecycle.preStop.sleep	1454
11.1.168. .spec.initContainers[].lifecycle.preStop.tcpSocket	1454
11.1.169. .spec.initContainers[].livenessProbe	1455
11.1.170. .spec.initContainers[].livenessProbe.exec	1456
11.1.171. .spec.initContainers[].livenessProbe.grpc	1457
11.1.172. .spec.initContainers[].livenessProbe.httpGet	1457
11.1.173. .spec.initContainers[].livenessProbe.httpGet.httpHeaders	1458
11.1.174. .spec.initContainers[].livenessProbe.httpGet.httpHeaders[]	1458
11.1.175. .spec.initContainers[].livenessProbe.tcpSocket	1459
11.1.176. .spec.initContainers[].ports	1459
11.1.177. .spec.initContainers[].ports[]	1459
11.1.178. .spec.initContainers[].readinessProbe	1460
11.1.179. .spec.initContainers[].readinessProbe.exec	1462
11.1.180. .spec.initContainers[].readinessProbe.grpc	1463
11.1.181. .spec.initContainers[].readinessProbe.httpGet	1463
11.1.182. .spec.initContainers[].readinessProbe.httpGet.httpHeaders	1464
11.1.183. .spec.initContainers[].readinessProbe.httpGet.httpHeaders[]	1464
11.1.184. .spec.initContainers[].readinessProbe.tcpSocket	1465
11.1.185. .spec.initContainers[].resizePolicy	1465
11.1.186. .spec.initContainers[].resizePolicy[]	1465
11.1.187. .spec.initContainers[].resources	1466
11.1.188. .spec.initContainers[].resources.claims	1467
11.1.189. .spec.initContainers[].resources.claims[]	1467
11.1.190. .spec.initContainers[].securityContext	1468
11.1.191. .spec.initContainers[].securityContext.appArmorProfile	1470
11.1.192. .spec.initContainers[].securityContext.capabilities	1471

11.1.193. .spec.initContainers[].securityContext.seLinuxOptions	1471
11.1.194. .spec.initContainers[].securityContext.seccompProfile	1472
11.1.195. .spec.initContainers[].securityContext.windowsOptions	1473
11.1.196. .spec.initContainers[].startupProbe	1474
11.1.197. .spec.initContainers[].startupProbe.exec	1475
11.1.198. .spec.initContainers[].startupProbe.grpc	1476
11.1.199. .spec.initContainers[].startupProbe.httpGet	1476
11.1.200. .spec.initContainers[].startupProbe.httpGet.httpHeaders	1477
11.1.201. .spec.initContainers[].startupProbe.httpGet.httpHeaders[]	1477
11.1.202. .spec.initContainers[].startupProbe.tcpSocket	1478
11.1.203. .spec.initContainers[].volumeDevices	1478
11.1.204. .spec.initContainers[].volumeDevices[]	1478
11.1.205. .spec.initContainers[].volumeMounts	1479
11.1.206. .spec.initContainers[].volumeMounts[]	1479
11.1.207. .spec.objectStorageConfig	1481
11.1.208. .spec.podMetadata	1482
11.1.209. .spec.prometheusRulesExcludedFromEnforce	1483
11.1.210. .spec.prometheusRulesExcludedFromEnforce[]	1483
11.1.211. .spec.queryConfig	1484
11.1.212. .spec.remoteWrite	1484
11.1.213. .spec.remoteWrite[]	1484
11.1.214. .spec.remoteWrite[].authorization	1489
11.1.215. .spec.remoteWrite[].authorization.credentials	1490
11.1.216. .spec.remoteWrite[].azureAd	1491
11.1.217. .spec.remoteWrite[].azureAd.managedIdentity	1492
11.1.218. .spec.remoteWrite[].azureAd.oauth	1492
11.1.219. .spec.remoteWrite[].azureAd.oauth.clientSecret	1493
11.1.220. .spec.remoteWrite[].azureAd.sdk	1493
11.1.221. .spec.remoteWrite[].basicAuth	1494
11.1.222. .spec.remoteWrite[].basicAuth.password	1494
11.1.223. .spec.remoteWrite[].basicAuth.username	1495
11.1.224. .spec.remoteWrite[].metadataConfig	1496
11.1.225. .spec.remoteWrite[].oauth2	1496
11.1.226. .spec.remoteWrite[].oauth2.clientId	1498
11.1.227. .spec.remoteWrite[].oauth2.clientId.configMap	1498
11.1.228. .spec.remoteWrite[].oauth2.clientId.secret	1499
11.1.229. .spec.remoteWrite[].oauth2.clientSecret	1499
11.1.230. .spec.remoteWrite[].oauth2.proxyConnectHeader	1500
11.1.231. .spec.remoteWrite[].oauth2.proxyConnectHeader{}	1500
11.1.232. .spec.remoteWrite[].oauth2.proxyConnectHeader{}[]	1500
11.1.233. .spec.remoteWrite[].oauth2.tlsConfig	1501
11.1.234. .spec.remoteWrite[].oauth2.tlsConfig.ca	1502
11.1.235. .spec.remoteWrite[].oauth2.tlsConfig.ca.configMap	1502
11.1.236. .spec.remoteWrite[].oauth2.tlsConfig.ca.secret	1503
11.1.237. .spec.remoteWrite[].oauth2.tlsConfig.cert	1503
11.1.238. .spec.remoteWrite[].oauth2.tlsConfig.cert.configMap	1503
11.1.239. .spec.remoteWrite[].oauth2.tlsConfig.cert.secret	1504
11.1.240. .spec.remoteWrite[].oauth2.tlsConfig.keySecret	1505
11.1.241. .spec.remoteWrite[].proxyConnectHeader	1505
11.1.242. .spec.remoteWrite[].proxyConnectHeader{}	1505
11.1.243. .spec.remoteWrite[].proxyConnectHeader{}[]	1506
11.1.244. .spec.remoteWrite[].queueConfig	1506
11.1.245. .spec.remoteWrite[].sigv4	1507

11.1.246. .spec.remoteWrite[].sigv4.accessKey	1508
11.1.247. .spec.remoteWrite[].sigv4.secretKey	1509
11.1.248. .spec.remoteWrite[].tlsConfig	1509
11.1.249. .spec.remoteWrite[].tlsConfig.ca	1510
11.1.250. .spec.remoteWrite[].tlsConfig.ca.configMap	1511
11.1.251. .spec.remoteWrite[].tlsConfig.ca.secret	1511
11.1.252. .spec.remoteWrite[].tlsConfig.cert	1512
11.1.253. .spec.remoteWrite[].tlsConfig.cert.configMap	1512
11.1.254. .spec.remoteWrite[].tlsConfig.cert.secret	1513
11.1.255. .spec.remoteWrite[].tlsConfig.keySecret	1513
11.1.256. .spec.remoteWrite[].writeRelabelConfigs	1514
11.1.257. .spec.remoteWrite[].writeRelabelConfigs[]	1514
11.1.258. .spec.resources	1515
11.1.259. .spec.resources.claims	1516
11.1.260. .spec.resources.claims[]	1517
11.1.261. .spec.ruleNamespaceSelector	1517
11.1.262. .spec.ruleNamespaceSelector.matchExpressions	1518
11.1.263. .spec.ruleNamespaceSelector.matchExpressions[]	1518
11.1.264. .spec.ruleSelector	1519
11.1.265. .spec.ruleSelector.matchExpressions	1519
11.1.266. .spec.ruleSelector.matchExpressions[]	1520
11.1.267. .spec.securityContext	1520
11.1.268. .spec.securityContext.appArmorProfile	1525
11.1.269. .spec.securityContext.seLinuxOptions	1525
11.1.270. .spec.securityContext.seccompProfile	1526
11.1.271. .spec.securityContext.sysctls	1527
11.1.272. .spec.securityContext.sysctls[]	1527
11.1.273. .spec.securityContext.windowsOptions	1527
11.1.274. .spec.storage	1528
11.1.275. .spec.storage.emptyDir	1529
11.1.276. .spec.storage.ephemeral	1530
11.1.277. .spec.storage.ephemeral.volumeClaimTemplate	1531
11.1.278. .spec.storage.ephemeral.volumeClaimTemplate.metadata	1532
11.1.279. .spec.storage.ephemeral.volumeClaimTemplate.spec	1532
11.1.280. .spec.storage.ephemeral.volumeClaimTemplate.spec.dataSource	1536
11.1.281. .spec.storage.ephemeral.volumeClaimTemplate.spec.dataSourceRef	1537
11.1.282. .spec.storage.ephemeral.volumeClaimTemplate.spec.resources	1538
11.1.283. .spec.storage.ephemeral.volumeClaimTemplate.spec.selector	1539
11.1.284. .spec.storage.ephemeral.volumeClaimTemplate.spec.selector.matchExpressions	1539
11.1.285. .spec.storage.ephemeral.volumeClaimTemplate.spec.selector.matchExpressions[]	1540
11.1.286. .spec.storage.volumeClaimTemplate	1540
11.1.287. .spec.storage.volumeClaimTemplate.metadata	1541
11.1.288. .spec.storage.volumeClaimTemplate.spec	1542
11.1.289. .spec.storage.volumeClaimTemplate.spec.dataSource	1546
11.1.290. .spec.storage.volumeClaimTemplate.spec.dataSourceRef	1547
11.1.291. .spec.storage.volumeClaimTemplate.spec.resources	1548
11.1.292. .spec.storage.volumeClaimTemplate.spec.selector	1549
11.1.293. .spec.storage.volumeClaimTemplate.spec.selector.matchExpressions	1549
11.1.294. .spec.storage.volumeClaimTemplate.spec.selector.matchExpressions[]	1550
11.1.295. .spec.storage.volumeClaimTemplate.status	1550
11.1.296. .spec.storage.volumeClaimTemplate.status.conditions	1554
11.1.297. .spec.storage.volumeClaimTemplate.status.conditions[]	1554
11.1.298. .spec.storage.volumeClaimTemplate.status.modifyVolumeStatus	1555

11.1.299. .spec.tolerations	1556
11.1.300. .spec.tolerations[]	1556
11.1.301. .spec.topologySpreadConstraints	1557
11.1.302. .spec.topologySpreadConstraints[]	1558
11.1.303. .spec.topologySpreadConstraints[].labelSelector	1562
11.1.304. .spec.topologySpreadConstraints[].labelSelector.matchExpressions	1563
11.1.305. .spec.topologySpreadConstraints[].labelSelector.matchExpressions[]	1563
11.1.306. .spec.tracingConfig	1564
11.1.307. .spec.volumeMounts	1565
11.1.308. .spec.volumeMounts[]	1565
11.1.309. .spec.volumes	1566
11.1.310. .spec.volumes[]	1567
11.1.311. .spec.volumes[].awsElasticBlockStore	1574
11.1.312. .spec.volumes[].azureDisk	1575
11.1.313. .spec.volumes[].azureFile	1576
11.1.314. .spec.volumes[].cephfs	1577
11.1.315. .spec.volumes[].cephfs.secretRef	1578
11.1.316. .spec.volumes[].cinder	1578
11.1.317. .spec.volumes[].cinder.secretRef	1579
11.1.318. .spec.volumes[].configMap	1580
11.1.319. .spec.volumes[].configMap.items	1581
11.1.320. .spec.volumes[].configMap.items[]	1581
11.1.321. .spec.volumes[].csi	1582
11.1.322. .spec.volumes[].csi.nodePublishSecretRef	1583
11.1.323. .spec.volumes[].downwardAPI	1584
11.1.324. .spec.volumes[].downwardAPI.items	1584
11.1.325. .spec.volumes[].downwardAPI.items[]	1585
11.1.326. .spec.volumes[].downwardAPI.items[].fieldRef	1586
11.1.327. .spec.volumes[].downwardAPI.items[].resourceFieldRef	1586
11.1.328. .spec.volumes[].emptyDir	1586
11.1.329. .spec.volumes[].ephemeral	1587
11.1.330. .spec.volumes[].ephemeral.volumeClaimTemplate	1588
11.1.331. .spec.volumes[].ephemeral.volumeClaimTemplate.metadata	1589
11.1.332. .spec.volumes[].ephemeral.volumeClaimTemplate.spec	1589
11.1.333. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.dataSource	1593
11.1.334. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.dataSourceRef	1594
11.1.335. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.resources	1595
11.1.336. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.selector	1596
11.1.337. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.selector.matchExpressions	1596
11.1.338. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.selector.matchExpressions[]	1597
11.1.339. .spec.volumes[].fc	1597
11.1.340. .spec.volumes[].flexVolume	1598
11.1.341. .spec.volumes[].flexVolume.secretRef	1599
11.1.342. .spec.volumes[].flocker	1599
11.1.343. .spec.volumes[].gcePersistentDisk	1600
11.1.344. .spec.volumes[].gitRepo	1601
11.1.345. .spec.volumes[].glusterfs	1602
11.1.346. .spec.volumes[].hostPath	1603
11.1.347. .spec.volumes[].image	1603
11.1.348. .spec.volumes[].iscsi	1605
11.1.349. .spec.volumes[].iscsi.secretRef	1607
11.1.350. .spec.volumes[].nfs	1607
11.1.351. .spec.volumes[].persistentVolumeClaim	1608

11.1.352. .spec.volumes[].photonPersistentDisk	1608
11.1.353. .spec.volumes[].portworxVolume	1609
11.1.354. .spec.volumes[].projected	1609
11.1.355. .spec.volumes[].projected.sources	1610
11.1.356. .spec.volumes[].projected.sources[]	1610
11.1.357. .spec.volumes[].projected.sources[].clusterTrustBundle	1611
11.1.358. .spec.volumes[].projected.sources[].clusterTrustBundle.labelSelector	1612
11.1.359. .spec.volumes[].projected.sources[].clusterTrustBundle.labelSelector.matchExpressions	1613
11.1.360. .spec.volumes[].projected.sources[].clusterTrustBundle.labelSelector.matchExpressions[]	1613
11.1.361. .spec.volumes[].projected.sources[].configMap	1614
11.1.362. .spec.volumes[].projected.sources[].configMap.items	1615
11.1.363. .spec.volumes[].projected.sources[].configMap.items[]	1615
11.1.364. .spec.volumes[].projected.sources[].downwardAPI	1616
11.1.365. .spec.volumes[].projected.sources[].downwardAPI.items	1616
11.1.366. .spec.volumes[].projected.sources[].downwardAPI.items[]	1616
11.1.367. .spec.volumes[].projected.sources[].downwardAPI.items[].fieldRef	1617
11.1.368. .spec.volumes[].projected.sources[].downwardAPI.items[].resourceFieldRef	1618
11.1.369. .spec.volumes[].projected.sources[].secret	1618
11.1.370. .spec.volumes[].projected.sources[].secret.items	1619
11.1.371. .spec.volumes[].projected.sources[].secret.items[]	1619
11.1.372. .spec.volumes[].projected.sources[].serviceAccountToken	1620
11.1.373. .spec.volumes[].quobyte	1621
11.1.374. .spec.volumes[].rbd	1622
11.1.375. .spec.volumes[].rbd.secretRef	1624
11.1.376. .spec.volumes[].scaleIO	1624
11.1.377. .spec.volumes[].scaleIO.secretRef	1625
11.1.378. .spec.volumes[].secret	1626
11.1.379. .spec.volumes[].secret.items	1627
11.1.380. .spec.volumes[].secret.items[]	1627
11.1.381. .spec.volumes[].storageos	1628
11.1.382. .spec.volumes[].storageos.secretRef	1629
11.1.383. .spec.volumes[].vsphereVolume	1630
11.1.384. .spec.web	1630
11.1.385. .spec.web.httpConfig	1631
11.1.386. .spec.web.httpConfig.headers	1631
11.1.387. .spec.web.tlsConfig	1632
11.1.388. .spec.web.tlsConfig.cert	1634
11.1.389. .spec.web.tlsConfig.cert.configMap	1635
11.1.390. .spec.web.tlsConfig.cert.secret	1635
11.1.391. .spec.web.tlsConfig.client_ca	1636
11.1.392. .spec.web.tlsConfig.client_ca.configMap	1636
11.1.393. .spec.web.tlsConfig.client_ca.secret	1637
11.1.394. .spec.web.tlsConfig.keySecret	1637
11.1.395. .status	1638
11.1.396. .status.conditions	1639
11.1.397. .status.conditions[]	1639
11.2. API ENDPOINTS	1640
11.2.1. /apis/monitoring.coreos.com/v1/thanosrulers	1641
11.2.2. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/thanosrulers	1641
11.2.3. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/thanosrulers/{name}	1643
11.2.4. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/thanosrulers/{name}/status	1646

CHAPTER 12. NODEMETRICS [METRICS.K8S.IO/V1BETA1]	1650

12.1. SPECIFICATION	1650
12.2. API ENDPOINTS	1651
12.2.1. /apis/metrics.k8s.io/v1beta1/nodes	1651
12.2.2. /apis/metrics.k8s.io/v1beta1/nodes/{name}	1651
CHAPTER 13. PODMETRICS [METRICS.K8S.IO/V1BETA1]	1653
13.1. SPECIFICATION	1653
13.1.1. .containers	1654
13.1.2. .containers[]	1654
13.2. API ENDPOINTS	1654
13.2.1. /apis/metrics.k8s.io/v1beta1/pods	1655
13.2.2. /apis/metrics.k8s.io/v1beta1/namespaces/{namespace}/pods	1655
13.2.3. /apis/metrics.k8s.io/v1beta1/namespaces/{namespace}/pods/{name}	1655

CHAPTER 1. MONITORING APIS

1.1. ALERTMANAGER [MONITORING.COREOS.COM/V1]

Description

The **Alertmanager** custom resource definition (CRD) defines a desired [Alertmanager] (<https://prometheus.io/docs/alerting>) setup to run in a Kubernetes cluster. It allows to specify many options such as the number of replicas, persistent storage and many more.

For each **Alertmanager** resource, the Operator deploys a **StatefulSet** in the same namespace. When there are two or more configured replicas, the Operator runs the Alertmanager instances in high-availability mode.

The resource defines via label and namespace selectors which **AlertmanagerConfig** objects should be associated to the deployed Alertmanager instances.

Type

object

1.2. ALERTMANAGERCONFIG [MONITORING.COREOS.COM/V1BETA1]

Description

The **AlertmanagerConfig** custom resource definition (CRD) defines how **Alertmanager** objects process Prometheus alerts. It allows to specify alert grouping and routing, notification receivers and inhibition rules.

Alertmanager objects select **AlertmanagerConfig** objects using label and namespace selectors.

Type

object

1.3. ALERTRELABELCONFIG [MONITORING.OPENSIFT.IO/V1]

Description

AlertRelabelConfig defines a set of relabel configs for alerts.

Compatibility level 1: Stable within a major release for a minimum of 12 months or 3 minor releases (whichever is longer).

Type

object

1.4. ALERTINGRULE [MONITORING.OPENSIFT.IO/V1]

Description

AlertingRule represents a set of user-defined Prometheus rule groups containing alerting rules. This resource is the supported method for cluster admins to create alerts based on metrics recorded by the platform monitoring stack in OpenShift, i.e. the Prometheus instance deployed to the openshift-monitoring namespace. You might use this to create custom alerting rules not shipped with OpenShift based on metrics from components such as the node_exporter, which provides machine-level metrics such as CPU usage, or kube-state-metrics, which provides metrics on Kubernetes usage.

The API is mostly compatible with the upstream PrometheusRule type from the prometheus-operator. The primary difference being that recording rules are not allowed here – only alerting rules. For each AlertingRule resource created, a corresponding PrometheusRule will be created in the openshift-monitoring namespace. OpenShift requires admins to use the AlertingRule resource rather than the upstream type in order to allow better OpenShift specific defaulting and validation, while not modifying the upstream APIs directly.

You can find upstream API documentation for PrometheusRule resources here:

<https://github.com/prometheus-operator/prometheus-operator/blob/main/Documentation/api.md>

Compatibility level 1: Stable within a major release for a minimum of 12 months or 3 minor releases (whichever is longer).

Type

object

1.5. PODMONITOR [MONITORING.COREOS.COM/V1]

Description

The **PodMonitor** custom resource definition (CRD) defines how **Prometheus** and **PrometheusAgent** can scrape metrics from a group of pods. Among other things, it allows to specify:

- * The pods to scrape via label selectors.
- * The container ports to scrape.
- * Authentication credentials to use.
- * Target and metric relabeling.

Prometheus and **PrometheusAgent** objects select **PodMonitor** objects using label and namespace selectors.

Type

object

1.6. PROBE [MONITORING.COREOS.COM/V1]

Description

The **Probe** custom resource definition (CRD) defines how to scrape metrics from prober exporters such as the [blackbox exporter](https://github.com/prometheus/blackbox_exporter).

The **Probe** resource needs 2 pieces of information:

- * The list of probed addresses which can be defined statically or by discovering Kubernetes Ingress objects.
- * The prober which exposes the availability of probed endpoints (over various protocols such HTTP, TCP, ICMP, ...) as Prometheus metrics.

Prometheus and **PrometheusAgent** objects select **Probe** objects using label and namespace selectors.

Type

object

1.7. PROMETHEUS [MONITORING.COREOS.COM/V1]

Description

The **Prometheus** custom resource definition (CRD) defines a desired [Prometheus]

(<https://prometheus.io/docs/prometheus>) setup to run in a Kubernetes cluster. It allows to specify many options such as the number of replicas, persistent storage, and Alertmanagers where firing alerts should be sent and many more.

For each **Prometheus** resource, the Operator deploys one or several **StatefulSet** objects in the same namespace. The number of StatefulSets is equal to the number of shards which is 1 by default.

The resource defines via label and namespace selectors which **ServiceMonitor**, **PodMonitor**, **Probe** and **PrometheusRule** objects should be associated to the deployed Prometheus instances.

The Operator continuously reconciles the scrape and rules configuration and a sidecar container running in the Prometheus pods triggers a reload of the configuration when needed.

Type

object

1.8. PROMETHEUSRULE [MONITORING.COREOS.COM/V1]

Description

The **PrometheusRule** custom resource definition (CRD) defines [alerting] (https://prometheus.io/docs/prometheus/latest/configuration/alerting_rules/) and [recording] (https://prometheus.io/docs/prometheus/latest/configuration/recording_rules/) rules to be evaluated by **Prometheus** or **ThanosRuler** objects.

Prometheus and **ThanosRuler** objects select **PrometheusRule** objects using label and namespace selectors.

Type

object

1.9. SERVICEMONITOR [MONITORING.COREOS.COM/V1]

Description

The **ServiceMonitor** custom resource definition (CRD) defines how **Prometheus** and **PrometheusAgent** can scrape metrics from a group of services. Among other things, it allows to specify: * The services to scrape via label selectors. * The container ports to scrape. * Authentication credentials to use. * Target and metric relabeling.

Prometheus and **PrometheusAgent** objects select **ServiceMonitor** objects using label and namespace selectors.

Type

object

1.10. THANOSRULER [MONITORING.COREOS.COM/V1]

Description

The **ThanosRuler** custom resource definition (CRD) defines a desired [Thanos Ruler] (<https://github.com/thanos-io/thanos/blob/main/docs/components/rule.md>) setup to run in a Kubernetes cluster.

A **ThanosRuler** instance requires at least one compatible Prometheus API endpoint (either Thanos Querier or Prometheus services).

The resource defines via label and namespace selectors which **PrometheusRule** objects should be associated to the deployed Thanos Ruler instances.

Type

object

1.11. NODEMETRICS [METRICS.K8S.IO/V1BETA1]

Description

NodeMetrics sets resource usage metrics of a node.

Type

object

1.12. PODMETRICS [METRICS.K8S.IO/V1BETA1]

Description

PodMetrics sets resource usage metrics of a pod.

Type

object

CHAPTER 2. ALERTMANAGER

[MONITORING.COREOS.COM/V1]

Description

The **Alertmanager** custom resource definition (CRD) defines a desired [Alertmanager] (<https://prometheus.io/docs/alerting>) setup to run in a Kubernetes cluster. It allows to specify many options such as the number of replicas, persistent storage and many more.

For each **Alertmanager** resource, the Operator deploys a **StatefulSet** in the same namespace. When there are two or more configured replicas, the Operator runs the Alertmanager instances in high-availability mode.

The resource defines via label and namespace selectors which **AlertmanagerConfig** objects should be associated to the deployed Alertmanager instances.

Type

object

Required

- **spec**

2.1. SPECIFICATION

Property	Type	Description
apiVersion	string	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	string	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds

Property	Type	Description
metadata	ObjectMeta	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	object	Specification of the desired behavior of the Alertmanager cluster. More info: https://github.com/kubernetes/community/blob/master/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	object	Most recent observed status of the Alertmanager cluster. Read-only. More info: https://github.com/kubernetes/community/blob/master/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

2.1.1. .spec

Description

Specification of the desired behavior of the Alertmanager cluster. More info:

<https://github.com/kubernetes/community/blob/master/contributors/devel/sig-architecture/api-conventions.md#spec-and-status>

Type

object

Property	Type	Description
additionalArgs	array	AdditionalArgs allows setting additional arguments for the 'Alertmanager' container. It is intended for e.g. activating hidden flags which are not supported by the dedicated configuration options yet. The arguments are passed as-is to the Alertmanager container which may cause issues if they are invalid or not supported by the given Alertmanager version.

Property	Type	Description
additionalArgs[]	object	Argument as part of the AdditionalArgs list.
additionalPeers	array (string)	AdditionalPeers allows injecting a set of additional Alertmanagers to peer with to form a highly available cluster.
affinity	object	If specified, the pod's scheduling constraints.
alertmanagerConfigMatcherStrategy	object	AlertmanagerConfigMatcherStrategy defines how AlertmanagerConfig objects process incoming alerts.
alertmanagerConfigNamespaceSelector	object	Namespaces to be selected for AlertmanagerConfig discovery. If nil, only check own namespace.
alertmanagerConfigSelector	object	AlertmanagerConfigs to be selected for to merge and configure Alertmanager with.
alertmanagerConfiguration	object	alertmanagerConfiguration specifies the configuration of Alertmanager. If defined, it takes precedence over the configSecret field. This is an experimental feature, it may change in any upcoming release in a breaking way.
automountServiceAccountToken	boolean	AutomountServiceAccountToken indicates whether a service account token should be automatically mounted in the pod. If the service account has automountServiceAccountToken: true, set the field to false to opt out of automounting API credentials.
baseImage	string	Base image that is used to deploy pods, without tag. Deprecated: use 'image' instead.

Property	Type	Description
clusterAdvertiseAddress	string	ClusterAdvertiseAddress is the explicit address to advertise in cluster. Needs to be provided for non RFC1918 [1] (public) addresses. [1] RFC1918: https://tools.ietf.org/html/rfc1918
clusterGossipInterval	string	Interval between gossip attempts.
clusterLabel	string	Defines the identifier that uniquely identifies the Alertmanager cluster. You should only set it when the Alertmanager cluster includes Alertmanager instances which are external to this Alertmanager resource. In practice, the addresses of the external instances are provided via the .spec.additionalPeers field.
clusterPeerTimeout	string	Timeout for cluster peering.
clusterPushpullInterval	string	Interval between pushpull attempts.
clusterTLS	object	Configures the mutual TLS configuration for the Alertmanager cluster's gossip protocol. It requires Alertmanager >= 0.24.0.
configMaps	array (string)	ConfigMaps is a list of ConfigMaps in the same namespace as the Alertmanager object, which shall be mounted into the Alertmanager Pods. Each ConfigMap is added to the StatefulSet definition as a volume named configmap- <configmap-name> . The ConfigMaps are mounted into /etc/alertmanager/configmaps/<configmap-name> in the 'alertmanager' container.

Property	Type	Description
configSecret	string	ConfigSecret is the name of a Kubernetes Secret in the same namespace as the Alertmanager object, which contains the configuration for this Alertmanager instance. If empty, it defaults to alertmanager-<code><alertmanager-name></code>. The Alertmanager configuration should be available under the alertmanager.yaml key. Additional keys from the original secret are copied to the generated secret and mounted into the /etc/alertmanager/config directory in the alertmanager container. If either the secret or the alertmanager.yaml key is missing, the operator provisions a minimal Alertmanager configuration with one empty receiver (effectively dropping alert notifications).
containers	array	Containers allows injecting additional containers. This is meant to allow adding an authentication proxy to an Alertmanager pod. Containers described here modify an operator generated container if they share the same name and modifications are done via a strategic merge patch. The current container names are: alertmanager and config-reloader. Overriding containers is entirely outside the scope of what the maintainers will support and by doing so, you accept that this behaviour may break at any time without notice.
containers[]	object	A single application container that you want to run within a pod.

Property	Type	Description
dnsConfig	object	Defines the DNS configuration for the pods.
dnsPolicy	string	Defines the DNS policy for the pods.
enableFeatures	array (string)	Enable access to Alertmanager feature flags. By default, no features are enabled. Enabling features which are disabled by default is entirely outside the scope of what the maintainers will support and by doing so, you accept that this behaviour may break at any time without notice. It requires Alertmanager >= 0.27.0.
enableServiceLinks	boolean	Indicates whether information about services should be injected into pod's environment variables
externalUrl	string	The external URL the Alertmanager instances will be available under. This is necessary to generate correct URLs. This is necessary if Alertmanager is not served from root of a DNS name.
forceEnableClusterMode	boolean	ForceEnableClusterMode ensures Alertmanager does not deactivate the cluster mode when running with a single replica. Use case is e.g. spanning an Alertmanager cluster across Kubernetes clusters with a single replica in each.
hostAliases	array	Pods' hostAliases configuration
hostAliases[]	object	HostAlias holds the mapping between IP and hostnames that will be injected as an entry in the pod's hosts file.

Property	Type	Description
hostUsers	boolean	HostUsers supports the user space in Kubernetes. More info: https://kubernetes.io/docs/tasks/configure-pod-container/user-namespaces/ The feature requires at least Kubernetes 1.28 with the UserNamespacesSupport feature gate enabled. Starting Kubernetes 1.33, the feature is enabled by default.
image	string	Image if specified has precedence over baseImage, tag and sha combinations. Specifying the version is still necessary to ensure the Prometheus Operator knows what version of Alertmanager is being configured.
imagePullPolicy	string	Image pull policy for the 'alertmanager', 'init-config-reloader' and 'config-reloader' containers. See https://kubernetes.io/docs/concepts/containers/images/#image-pull-policy for more details.
imagePullSecrets	array	An optional list of references to secrets in the same namespace to use for pulling prometheus and alertmanager images from registries see https://kubernetes.io/docs/tasks/configure-pod-container/pull-image-private-registry/
imagePullSecrets[]	object	LocalObjectReference contains enough information to let you locate the referenced object inside the same namespace.

Property	Type	Description
initContainers	array	InitContainers allows adding initContainers to the pod definition. Those can be used to e.g. fetch secrets for injection into the Alertmanager configuration from external sources. Any errors during the execution of an initContainer will lead to a restart of the Pod. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/ InitContainers described here modify an operator generated init containers if they share the same name and modifications are done via a strategic merge patch. The current init container name is: init-config-reloader . Overriding init containers is entirely outside the scope of what the maintainers will support and by doing so, you accept that this behaviour may break at any time without notice.
initContainers[]	object	A single application container that you want to run within a pod.
limits	object	Defines the limits command line flags when starting Alertmanager.
listenLocal	boolean	ListenLocal makes the Alertmanager server listen on loopback, so that it does not bind against the Pod IP. Note this is only for the Alertmanager UI, not the gossip communication.
logFormat	string	Log format for Alertmanager to be configured with.
logLevel	string	Log level for Alertmanager to be configured with.

Property	Type	Description
minReadySeconds	integer	Minimum number of seconds for which a newly created pod should be ready without any of its container crashing for it to be considered available. If unset, pods will be considered available as soon as they are ready.
nodeSelector	object (string)	Define which Nodes the Pods are scheduled on.
paused	boolean	If set to true all actions on the underlying managed objects are not going to be performed, except for delete actions.
persistentVolumeClaimRetentionPolicy	object	The field controls if and how PVCs are deleted during the lifecycle of a StatefulSet. The default behavior is all PVCs are retained. This is an alpha field from kubernetes 1.23 until 1.26 and a beta field from 1.26. It requires enabling the StatefulSetAutoDeletePVC feature gate.

Property	Type	Description
podMetadata	object	PodMetadata configures labels and annotations which are propagated to the Alertmanager pods. The following items are reserved and cannot be overridden: * "alertmanager" label, set to the name of the Alertmanager instance. * "app.kubernetes.io/instance" label, set to the name of the Alertmanager instance. * "app.kubernetes.io/managed-by" label, set to "prometheus-operator". * "app.kubernetes.io/name" label, set to "alertmanager". * "app.kubernetes.io/version" label, set to the Alertmanager version. * "kubectl.kubernetes.io/default-container" annotation, set to "alertmanager".
portName	string	Port name used for the pods and governing service. Defaults to web .
priorityClassName	string	Priority class assigned to the Pods
replicas	integer	Size is the expected size of the alertmanager cluster. The controller will eventually make the size of the running cluster equal to the expected size.
resources	object	Define resources requests and limits for single Pods.
retention	string	Time duration Alertmanager shall retain data for. Default is '120h', and must match the regular expression [0-9]+(ms s m h) (milliseconds seconds minutes hours).

Property	Type	Description
routePrefix	string	The route prefix Alertmanager registers HTTP handlers for. This is useful, if using ExternalURL and a proxy is rewriting HTTP routes of a request, and the actual ExternalURL is still true, but the server serves requests under a different route prefix. For example for use with kubectl proxy .
secrets	array (string)	Secrets is a list of Secrets in the same namespace as the Alertmanager object, which shall be mounted into the Alertmanager Pods. Each Secret is added to the StatefulSet definition as a volume named secret-<secret-name> . The Secrets are mounted into /etc/alertmanager/secrets/<secret-name> in the 'alertmanager' container.
securityContext	object	SecurityContext holds pod-level security attributes and common container settings. This defaults to the default PodSecurityContext.
serviceAccountName	string	ServiceAccountName is the name of the ServiceAccount to use to run the Prometheus Pods.

Property	Type	Description
serviceName	string	The name of the service name used by the underlying StatefulSet(s) as the governing service. If defined, the Service must be created before the Alertmanager resource in the same namespace and it must define a selector that matches the pod labels. If empty, the operator will create and manage a headless service named alertmanager-operated for Alertmanager resources. When deploying multiple Alertmanager resources in the same namespace, it is recommended to specify a different value for each. See https://kubernetes.io/docs/concepts/workloads/controllers/statefulset/#stable-network-id for more details.
sha	string	SHA of Alertmanager container image to be deployed. Defaults to the value of version . Similar to a tag, but the SHA explicitly deploys an immutable container image. Version and Tag are ignored if SHA is set. Deprecated: use 'image' instead. The image digest can be specified as part of the image URL.
storage	object	Storage is the definition of how storage will be used by the Alertmanager instances.
tag	string	Tag of Alertmanager container image to be deployed. Defaults to the value of version . Version is ignored if Tag is set. Deprecated: use 'image' instead. The image tag can be specified as part of the image URL.

Property	Type	Description
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down) which may lead to data corruption. Defaults to 120 seconds.
tolerations	array	If specified, the pod's tolerations.
tolerations[]	object	The pod this Tolerant is attached to tolerates any taint that matches the triple <key,value,effect> using the matching operator <operator>.
topologySpreadConstraints	array	If specified, the pod's topology spread constraints.
topologySpreadConstraints[]	object	TopologySpreadConstraint specifies how to spread matching pods among the given topology.
version	string	Version the cluster should be on.
volumeMounts	array	VolumeMounts allows configuration of additional VolumeMounts on the output StatefulSet definition. VolumeMounts specified will be appended to other VolumeMounts in the alertmanager container, that are generated as a result of StorageSpec objects.
volumeMounts[]	object	VolumeMount describes a mounting of a Volume within a container.
volumes	array	Volumes allows configuration of additional volumes on the output StatefulSet definition. Volumes specified will be appended to other volumes that are generated as a result of StorageSpec objects.

Property	Type	Description
volumes[]	object	Volume represents a named volume in a pod that may be accessed by any container in the pod.
web	object	Defines the web command line flags when starting Alertmanager.

2.1.2. .spec.additionalArgs

Description

AdditionalArgs allows setting additional arguments for the 'Alertmanager' container. It is intended for e.g. activating hidden flags which are not supported by the dedicated configuration options yet. The arguments are passed as-is to the Alertmanager container which may cause issues if they are invalid or not supported by the given Alertmanager version.

Type

array

2.1.3. .spec.additionalArgs[]

Description

Argument as part of the AdditionalArgs list.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name of the argument, e.g. "scrape.discovery-reload-interval".
value	string	Argument value, e.g. 30s. Can be empty for name-only arguments (e.g. --storage.tsdb.no-lockfile)

2.1.4. .spec.affinity

Description

If specified, the pod's scheduling constraints.

Type

object

Property	Type	Description
nodeAffinity	object	Describes node affinity scheduling rules for the pod.
podAffinity	object	Describes pod affinity scheduling rules (e.g. co-locate this pod in the same node, zone, etc. as some other pod(s)).
podAntiAffinity	object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same node, zone, etc. as some other pod(s)).

2.1.5. .spec.affinity.nodeAffinity**Description**

Describes node affinity scheduling rules for the pod.

Type

object

Property	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	array	The scheduler will prefer to schedule pods to nodes that satisfy the affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node matches the corresponding matchExpressions; the node(s) with the highest sum are the most preferred.

Property	Type	Description
preferredDuringSchedulingIgnoredDuringExecution[]	object	An empty preferred scheduling term matches all objects with implicit weight 0 (i.e. it's a no-op). A null preferred scheduling term matches no objects (i.e. is also a no-op).
requiredDuringSchedulingIgnoredDuringExecution	object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

2.1.6. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

The scheduler will prefer to schedule pods to nodes that satisfy the affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node matches the corresponding matchExpressions; the node(s) with the highest sum are the most preferred.

Type

array

2.1.7. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

An empty preferred scheduling term matches all objects with implicit weight 0 (i.e. it's a no-op). A null preferred scheduling term matches no objects (i.e. is also a no-op).

Type

object

Required

- **preference**
- **weight**

Property	Type	Description
preference	object	A node selector term, associated with the corresponding weight.
weight	integer	Weight associated with matching the corresponding nodeSelectorTerm, in the range 1-100.

2.1.8. `.spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[]`

Description

A node selector term, associated with the corresponding weight.

Type

object

Property	Type	Description
matchExpressions	array	A list of node selector requirements by node's labels.
matchExpressions[]	object	A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchFields	array	A list of node selector requirements by node's fields.
matchFields[]	object	A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

2.1.9. `.spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[]`

Description

A list of node selector requirements by node's labels.

Type

array

2.1.10. `.spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[]`

Description

A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type**object****Required**

- **key**
- **operator**

Property	Type	Description
key	string	The label key that the selector applies to.
operator	string	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist, Gt, and Lt.
values	array (string)	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

2.1.11. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

A list of node selector requirements by node's fields.

Type**array**

2.1.12. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[

Description

A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type**object****Required**

- **key**
- **operator**

Property	Type	Description
key	string	The label key that the selector applies to.
operator	string	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist, Gt, and Lt.
values	array (string)	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

2.1.13. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Type

object

Required

- **nodeSelectorTerms**

Property	Type	Description
nodeSelectorTerms	array	Required. A list of node selector terms. The terms are ORed.
nodeSelectorTerms[]	object	A null or empty node selector term matches no objects. The requirements of them are ANDed. The TopologySelectorTerm type implements a subset of the NodeSelectorTerm.

2.1.14. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.n

Description

Required. A list of node selector terms. The terms are ORed.

Type

array

2.1.15. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.n**Description**

A null or empty node selector term matches no objects. The requirements of them are ANDed. The TopologySelectorTerm type implements a subset of the NodeSelectorTerm.

Type

object

Property	Type	Description
matchExpressions	array	A list of node selector requirements by node's labels.
matchExpressions[]	object	A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchFields	array	A list of node selector requirements by node's fields.
matchFields[]	object	A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

2.1.16. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.n**Description**

A list of node selector requirements by node's labels.

Type

array

2.1.17. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.n**Description**

A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**

- **operator**

Property	Type	Description
key	string	The label key that the selector applies to.
operator	string	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist, Gt, and Lt.
values	array (string)	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

2.1.18. `.spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.n`

Description

A list of node selector requirements by node's fields.

Type

array

2.1.19. `.spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.n`

Description

A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description

Property	Type	Description
key	string	The label key that the selector applies to.
operator	string	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist, Gt, and Lt.
values	array (string)	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

2.1.20. .spec.affinity.podAffinity

Description

Describes pod affinity scheduling rules (e.g. co-locate this pod in the same node, zone, etc. as some other pod(s)).

Type

object

Property	Type	Description

Property	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	array	The scheduler will prefer to schedule pods to nodes that satisfy the affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
preferredDuringSchedulingIgnoredDuringExecution[]	object	The weights of all of the matched WeightedPodAffinityTerm fields are added per-node to find the most preferred node(s)
requiredDuringSchedulingIgnoredDuringExecution	array	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Property	Type	Description
requiredDuringSchedulingIgnoredDuringExecution[]	object	Defines a set of pods (namely those matching the labelSelector relative to the given namespace(s)) that this pod should be co-located (affinity) or not co-located (anti-affinity) with, where co-located is defined as running on a node whose value of the label with key <topologyKey> matches that of any node on which a pod of the set of pods is running

2.1.21. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

The scheduler will prefer to schedule pods to nodes that satisfy the affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.

Type

array

2.1.22. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

The weights of all of the matched WeightedPodAffinityTerm fields are added per-node to find the most preferred node(s)

Type

object

Required

- **podAffinityTerm**
- **weight**

Property	Type	Description
podAffinityTerm	object	Required. A pod affinity term, associated with the corresponding weight.

Property	Type	Description
weight	integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

2.1.23. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

Required. A pod affinity term, associated with the corresponding weight.

Type

object

Required

- **topologyKey**

Property	Type	Description
labelSelector	object	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.
matchLabelKeys	array (string)	MatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key in (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both matchLabelKeys and labelSelector. Also, matchLabelKeys cannot be set when labelSelector isn't set.

Property	Type	Description
mismatchLabelKeys	array (string)	MismatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key notin (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both mismatchLabelKeys and labelSelector. Also, mismatchLabelKeys cannot be set when labelSelector isn't set.
namespaceSelector	object	A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.
namespaces	array (string)	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".

Property	Type	Description
topologyKey	string	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

2.1.24. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

2.1.25. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

2.1.26. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

2.1.27. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.

Property	Type	Description
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

2.1.28. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

2.1.29. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

2.1.30. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Type

array

2.1.31. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[]

Description

Defines a set of pods (namely those matching the labelSelector relative to the given namespace(s)) that this pod should be co-located (affinity) or not co-located (anti-affinity) with, where co-located is defined as running on a node whose value of the label with key <topologyKey> matches that of any node on which a pod of the set of pods is running

Type

object

Required

- **topologyKey**

Property	Type	Description
labelSelector	object	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.

Property	Type	Description
matchLabelKeys	array (string)	MatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key in (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both matchLabelKeys and labelSelector. Also, matchLabelKeys cannot be set when labelSelector isn't set.
mismatchLabelKeys	array (string)	MismatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key not in (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both mismatchLabelKeys and labelSelector. Also, mismatchLabelKeys cannot be set when labelSelector isn't set.
namespaceSelector	object	A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.

Property	Type	Description
namespaces	array (string)	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	string	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

2.1.32. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].l

Description

A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.

Type

object

Property	Type	Description

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

2.1.33. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].l

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

2.1.34. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].l

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.

Property	Type	Description
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

2.1.35. `.spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[]`

Description

A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

2.1.36. `.spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[]`

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

2.1.37. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].i

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

2.1.38. .spec.affinity.podAntiAffinity

Description

Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same node, zone, etc. as some other pod(s)).

Type

object

Property	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	array	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
preferredDuringSchedulingIgnoredDuringExecution[]	object	The weights of all of the matched WeightedPodAffinityTerm fields are added per-node to find the most preferred node(s)
requiredDuringSchedulingIgnoredDuringExecution	array	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Property	Type	Description
requiredDuringSchedulingIgnoredDuringExecution[]	object	Defines a set of pods (namely those matching the labelSelector relative to the given namespace(s)) that this pod should be co-located (affinity) or not co-located (anti-affinity) with, where co-located is defined as running on a node whose value of the label with key <topologyKey> matches that of any node on which a pod of the set of pods is running

2.1.39. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.

Type

array

2.1.40. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

The weights of all of the matched WeightedPodAffinityTerm fields are added per-node to find the most preferred node(s)

Type

object

Required

- **podAffinityTerm**
- **weight**

Property	Type	Description
podAffinityTerm	object	Required. A pod affinity term, associated with the corresponding weight.

Property	Type	Description
weight	integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

2.1.41. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

Required. A pod affinity term, associated with the corresponding weight.

Type

object

Required

- **topologyKey**

Property	Type	Description
labelSelector	object	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.
matchLabelKeys	array (string)	MatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key in (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both matchLabelKeys and labelSelector. Also, matchLabelKeys cannot be set when labelSelector isn't set.

Property	Type	Description
mismatchLabelKeys	array (string)	MismatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key notin (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both mismatchLabelKeys and labelSelector. Also, mismatchLabelKeys cannot be set when labelSelector isn't set.
namespaceSelector	object	A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.
namespaces	array (string)	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".

Property	Type	Description
topologyKey	string	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

2.1.42. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

2.1.43. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

2.1.44. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecut

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

2.1.45. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecuti

Description

A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.

Property	Type	Description
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

2.1.46. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

2.1.47. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

2.1.48. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Type

array

2.1.49. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

Defines a set of pods (namely those matching the labelSelector relative to the given namespace(s)) that this pod should be co-located (affinity) or not co-located (anti-affinity) with, where co-located is defined as running on a node whose value of the label with key <topologyKey> matches that of any node on which a pod of the set of pods is running

Type

object

Required

- **topologyKey**

Property	Type	Description
labelSelector	object	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.

Property	Type	Description
matchLabelKeys	array (string)	MatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key in (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both matchLabelKeys and labelSelector. Also, matchLabelKeys cannot be set when labelSelector isn't set.
mismatchLabelKeys	array (string)	MismatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key notin (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both mismatchLabelKeys and labelSelector. Also, mismatchLabelKeys cannot be set when labelSelector isn't set.
namespaceSelector	object	A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.

Property	Type	Description
namespaces	array (string)	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	string	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

2.1.50. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.

Type

object

Property	Type	Description

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

2.1.51. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

2.1.52. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.

Property	Type	Description
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

2.1.53. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

2.1.54. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

2.1.55. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecutio

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

2.1.56. .spec.alertmanagerConfigMatcherStrategy

Description

AlertmanagerConfigMatcherStrategy defines how AlertmanagerConfig objects process incoming alerts.

Type

object

Property	Type	Description

Property	Type	Description
type	string	AlertmanagerConfigMatcherStrategyType defines the strategy used by AlertmanagerConfig objects to match alerts in the routes and inhibition rules. The default value is OnNamespace .

2.1.57. .spec.alertmanagerConfigNamespaceSelector

Description

Namespaces to be selected for AlertmanagerConfig discovery. If nil, only check own namespace.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

2.1.58. .spec.alertmanagerConfigNamespaceSelector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

2.1.59. .spec.alertmanagerConfigNamespaceSelector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

2.1.60. .spec.alertmanagerConfigSelector

Description

AlertmanagerConfigs to be selected for to merge and configure Alertmanager with.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.

Property	Type	Description
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

2.1.61. .spec.alertmanagerConfigSelector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

2.1.62. .spec.alertmanagerConfigSelector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

2.1.63. .spec.alertmanagerConfiguration

Description

alertmanagerConfiguration specifies the configuration of Alertmanager. If defined, it takes precedence over the **configSecret** field.

This is an **experimental feature**, it may change in any upcoming release in a breaking way.

Type

object

Property	Type	Description
global	object	Defines the global parameters of the Alertmanager configuration.
name	string	The name of the AlertmanagerConfig resource which is used to generate the Alertmanager configuration. It must be defined in the same namespace as the Alertmanager object. The operator will not enforce a namespace label for routes and inhibition rules.
templates	array	Custom notification templates.
templates[]	object	SecretOrConfigMap allows to specify data as a Secret or ConfigMap. Fields are mutually exclusive.

2.1.64. .spec.alertmanagerConfiguration.global

Description

Defines the global parameters of the Alertmanager configuration.

Type

object

Property	Type	Description
httpConfig	object	HTTP client configuration.
jira	object	The default configuration for Jira.
opsGenieApiKey	object	The default OpsGenie API Key.
opsGenieApiUrl	object	The default OpsGenie API URL.
pagerdutyUrl	string	The default Pagerduty URL.
resolveTimeout	string	ResolveTimeout is the default value used by alertmanager if the alert does not include EndsAt, after this time passes it can declare the alert as resolved if it has not been updated. This has no impact on alerts from Prometheus, as they always include EndsAt.
rocketChat	object	The default configuration for Rocket Chat.
slackApiUrl	object	The default Slack API URL.
smtp	object	Configures global SMTP parameters.
telegram	object	The default Telegram config
victorops	object	The default configuration for VictorOps.
webex	object	The default configuration for Jira.
wechat	object	The default WeChat Config

2.1.65. .spec.alertmanagerConfiguration.global.httpConfig

Description

HTTP client configuration.

Type

object

Property	Type	Description
authorization	object	Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.
basicAuth	object	BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.
bearerTokenSecret	object	The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the Alertmanager object and accessible by the Prometheus Operator.
followRedirects	boolean	FollowRedirects specifies whether the client should follow HTTP 3xx redirects.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
oauth2	object	OAuth2 client credentials used to fetch a token for the targets.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	

Property	Type	Description
proxyConnectHeader{}	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
tlsConfig	object	TLS configuration for the client.

2.1.66. .spec.alertmanagerConfiguration.global.httpConfig.authorization

Description

Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

2.1.67. .spec.alertmanagerConfiguration.global.httpConfig.authorization.credentials

Description

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.68. .spec.alertmanagerConfiguration.global.httpConfig.basicAuth**Description**

BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

2.1.69. .spec.alertmanagerConfiguration.global.httpConfig.basicAuth.password**Description**

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.70. .spec.alertmanagerConfiguration.global.httpConfig.basicAuth.username

Description

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.71. .spec.alertmanagerConfiguration.global.httpConfig.bearerTokenSecret

Description

The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the Alertmanager object and accessible by the Prometheus Operator.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.72. .spec.alertmanagerConfiguration.global.httpConfig.oauth2

Description

OAuth2 client credentials used to fetch a token for the targets.

Type

object

Required

- **clientId**
- **clientSecret**
- **tokenUrl**

Property	Type	Description

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Property	Type	Description
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

2.1.73. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

2.1.74. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

2.1.75. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.clientId.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.76. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.77. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.proxyConnectHead

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

2.1.78. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.proxyConnectHead

Description

Type

array

2.1.79. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.proxyConnectHead []

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.80. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.tlsConfig

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.

Property	Type	Description
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

2.1.81. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

2.1.82. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.tlsConfig.ca.config

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

2.1.83. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.84. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

2.1.85. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.tlsConfig.cert.conf

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

2.1.86. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.87. .spec.alertmanagerConfiguration.global.httpConfig.oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.88. .spec.alertmanagerConfiguration.global.httpConfig.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

2.1.89. .spec.alertmanagerConfiguration.global.httpConfig.proxyConnectHeader{}

Description

Type

array

2.1.90. .spec.alertmanagerConfiguration.global.httpConfig.proxyConnectHeader{[]}[]

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.91. .spec.alertmanagerConfiguration.global.httpConfig.tlsConfig

Description

TLS configuration for the client.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

2.1.92. `.spec.alertmanagerConfiguration.global.httpConfig.tlsConfig.ca`

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

2.1.93. `.spec.alertmanagerConfiguration.global.httpConfig.tlsConfig.ca.configMap`

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

2.1.94. .spec.alertmanagerConfiguration.global.httpConfig.tlsConfig.ca.secret**Description**

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.95. .spec.alertmanagerConfiguration.global.httpConfig.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

2.1.96. .spec.alertmanagerConfiguration.global.httpConfig.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

2.1.97. .spec.alertmanagerConfiguration.global.httpConfig.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.98. .spec.alertmanagerConfiguration.global.httpConfig.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.99. .spec.alertmanagerConfiguration.global.jira**Description**

The default configuration for Jira.

Type**object**

Property	Type	Description
apiURL	string	The default Jira API URL. It requires Alertmanager >= v0.28.0.

2.1.100. .spec.alertmanagerConfiguration.global.opsGenieApiKey**Description**

The default OpsGenie API Key.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.101. .spec.alertmanagerConfiguration.global.opsGenieApiUrl

Description

The default OpsGenie API URL.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.102. .spec.alertmanagerConfiguration.global.rocketChat

Description

The default configuration for Rocket Chat.

Type

object

Property	Type	Description
apiURL	string	The default Rocket Chat API URL. It requires Alertmanager >= v0.28.0.
token	object	The default Rocket Chat token. It requires Alertmanager >= v0.28.0.
tokenID	object	The default Rocket Chat Token ID. It requires Alertmanager >= v0.28.0.

2.1.103. .spec.alertmanagerConfiguration.global.rocketChat.token**Description**

The default Rocket Chat token.

It requires Alertmanager >= v0.28.0.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.104. .spec.alertmanagerConfiguration.global.rocketChat.tokenID

Description

The default Rocket Chat Token ID.
It requires Alertmanager >= v0.28.0.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.105. .spec.alertmanagerConfiguration.global.slackApiUrl

Description

The default Slack API URL.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.106. .spec.alertmanagerConfiguration.global.smtp

Description

Configures global SMTP parameters.

Type

object

Property	Type	Description
authIdentity	string	SMTP Auth using PLAIN
authPassword	object	SMTP Auth using LOGIN and PLAIN.
authSecret	object	SMTP Auth using CRAM-MD5.
authUsername	string	SMTP Auth using CRAM-MD5, LOGIN and PLAIN. If empty, Alertmanager doesn't authenticate to the SMTP server.

Property	Type	Description
from	string	The default SMTP From header field.
hello	string	The default hostname to identify to the SMTP server.
requireTLS	boolean	The default SMTP TLS requirement. Note that Go does not support unencrypted connections to remote SMTP endpoints.
smartHost	object	The default SMTP smarthost used for sending emails.
tlsConfig	object	The default TLS configuration for SMTP receivers

2.1.107. .spec.alertmanagerConfiguration.global.smtp.authPassword

Description

SMTP Auth using LOGIN and PLAIN.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.108. .spec.alertmanagerConfiguration.global.smtp.authSecret

Description

SMTP Auth using CRAM-MD5.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.109. .spec.alertmanagerConfiguration.global.smtp.smartHost

Description

The default SMTP smarthost used for sending emails.

Type

object

Required

- **host**
- **port**

Property	Type	Description
host	string	Defines the host's address, it can be a DNS name or a literal IP address.

Property	Type	Description
port	string	Defines the host's port, it can be a literal port number or a port name.

2.1.110. .spec.alertmanagerConfiguration.global.smtp.tlsConfig

Description

The default TLS configuration for SMTP receivers

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

2.1.111. .spec.alertmanagerConfiguration.global.smtp.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

2.1.112. .spec.alertmanagerConfiguration.global.smtp.tlsConfig.ca.configMap**Description**

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

2.1.113. .spec.alertmanagerConfiguration.global.smtp.tlsConfig.ca.secret**Description**

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.114. .spec.alertmanagerConfiguration.global.smtp.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

2.1.115. .spec.alertmanagerConfiguration.global.smtp.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

2.1.116. .spec.alertmanagerConfiguration.global.smtp.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.117. .spec.alertmanagerConfiguration.global.smtp.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object**Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.118. .spec.alertmanagerConfiguration.global.telegram**Description**

The default Telegram config

Type**object**

Property	Type	Description
apiURL	string	The default Telegram API URL. It requires Alertmanager >= v0.24.0.

2.1.119. .spec.alertmanagerConfiguration.global.victorops**Description**

The default configuration for VictorOps.

Type**object**

Property	Type	Description
apiKey	object	The default VictorOps API Key.
apiURL	string	The default VictorOps API URL.

2.1.120. .spec.alertmanagerConfiguration.global.victorops.apiKey

Description

The default VictorOps API Key.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.121. .spec.alertmanagerConfiguration.global.webex

Description

The default configuration for Jira.

Type

object

Property	Type	Description

Property	Type	Description
apiURL	string	The default Webex API URL. It requires Alertmanager >= v0.25.0.

2.1.122. .spec.alertmanagerConfiguration.global.wechat

Description

The default WeChat Config

Type

object

Property	Type	Description
apiCorpID	string	The default WeChat API Corporate ID.
apiSecret	object	The default WeChat API Secret.
apiURL	string	The default WeChat API URL. The default value is "https://qyapi.weixin.qq.com/cgi-bin/"

2.1.123. .spec.alertmanagerConfiguration.global.wechat.apiSecret

Description

The default WeChat API Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.124. .spec.alertmanagerConfiguration.templates

Description

Custom notification templates.

Type

array

2.1.125. .spec.alertmanagerConfiguration.templates[]

Description

SecretOrConfigMap allows to specify data as a Secret or ConfigMap. Fields are mutually exclusive.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

2.1.126. .spec.alertmanagerConfiguration.templates[].configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

2.1.127. .spec.alertmanagerConfiguration.templates[].secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.128. .spec.clusterTLS

Description

Configures the mutual TLS configuration for the Alertmanager cluster's gossip protocol.
It requires Alertmanager $\geq$ 0.24.0.

Type**object****Required**

- **client**
- **server**

Property	Type	Description
client	object	Client-side configuration for mutual TLS.
server	object	Server-side configuration for mutual TLS.

2.1.129. .spec.clusterTLS.client**Description**

Client-side configuration for mutual TLS.

Type**object**

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus $\geq$ v2.41.0 or Thanos $\geq$ v0.31.0.

Property	Type	Description
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

2.1.130. .spec.clusterTLS.client.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

2.1.131. .spec.clusterTLS.client.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

2.1.132. .spec.clusterTLS.client.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.133. .spec.clusterTLS.client.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

2.1.134. .spec.clusterTLS.client.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

2.1.135. .spec.clusterTLS.client.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.136. .spec.clusterTLS.client.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.137. .spec.clusterTLS.server

Description

Server-side configuration for mutual TLS.

Type

object

Property	Type	Description
cert	object	Secret or ConfigMap containing the TLS certificate for the web server. Either keySecret or keyFile must be defined. It is mutually exclusive with certFile.
certFile	string	Path to the TLS certificate file in the container for the web server. Either keySecret or keyFile must be defined. It is mutually exclusive with cert.
cipherSuites	array (string)	List of supported cipher suites for TLS versions up to TLS 1.2. If not defined, the Go default cipher suites are used. Available cipher suites are documented in the Go documentation: https://golang.org/pkg/crypto/tls/#pkg-constants
clientAuthType	string	The server policy for client TLS authentication. For more detail on clientAuth options: https://golang.org/pkg/crypto/tls/#ClientAuthType
clientCAFile	string	Path to the CA certificate file for client certificate authentication to the server. It is mutually exclusive with client_ca.

Property	Type	Description
client_ca	object	Secret or ConfigMap containing the CA certificate for client certificate authentication to the server. It is mutually exclusive with clientCAFile.
curvePreferences	array (string)	Elliptic curves that will be used in an ECDHE handshake, in preference order. Available curves are documented in the Go documentation: https://golang.org/pkg/crypto/tls/#CurveID
keyFile	string	Path to the TLS private key file in the container for the web server. If defined, either cert or certFile must be defined. It is mutually exclusive with keySecret.
keySecret	object	Secret containing the TLS private key for the web server. Either cert or certFile must be defined. It is mutually exclusive with keyFile.
maxVersion	string	Maximum TLS version that is acceptable.
minVersion	string	Minimum TLS version that is acceptable.
preferServerCipherSuites	boolean	Controls whether the server selects the client's most preferred cipher suite, or the server's most preferred cipher suite. If true then the server's preference, as expressed in the order of elements in cipherSuites, is used.

2.1.138. .spec.clusterTLS.server.cert

Description

Secret or ConfigMap containing the TLS certificate for the web server.
Either **keySecret** or **keyFile** must be defined.

It is mutually exclusive with **certFile**.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

2.1.139. .spec.clusterTLS.server.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

2.1.140. .spec.clusterTLS.server.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.141. .spec.clusterTLS.server.client_ca**Description**

Secret or ConfigMap containing the CA certificate for client certificate authentication to the server. It is mutually exclusive with **clientCAFile**.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

2.1.142. .spec.clusterTLS.server.client_ca.configMap**Description**

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

2.1.143. .spec.clusterTLS.server.client_ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

2.1.144. .spec.clusterTLS.server.keySecret

Description

Secret containing the TLS private key for the web server.
Either **cert** or **certFile** must be defined.

It is mutually exclusive with **keyFile**.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.145. .spec.containers

Description

Containers allows injecting additional containers. This is meant to allow adding an authentication proxy to an Alertmanager pod. Containers described here modify an operator generated container if they share the same name and modifications are done via a strategic merge patch. The current container names are: **alertmanager** and **config-reloader**. Overriding containers is entirely outside the scope of what the maintainers will support and by doing so, you accept that this behaviour may break at any time without notice.

Type

array**2.1.146. .spec.containers[]****Description**

A single application container that you want to run within a pod.

Type**object****Required**

- **name**

Property	Type	Description
args	array (string)	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$(VAR_NAME)" will produce the string literal "\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Property	Type	Description
command	array (string)	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$(VAR_NAME)" will produce the string literal "\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	array	List of environment variables to set in the container. Cannot be updated.
env[]	object	EnvVar represents an environment variable present in a Container.
envFrom	array	List of sources to populate environment variables in the container. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.
envFrom[]	object	EnvFromSource represents the source of a set of ConfigMaps or Secrets

Property	Type	Description
image	string	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
imagePullPolicy	string	Image pull policy. One of Always, Never, IfNotPresent. Defaults to Always if :latest tag is specified, or IfNotPresent otherwise. Cannot be updated. More info: https://kubernetes.io/docs/concepts/containers/images#updating-images
lifecycle	object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	string	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.

Property	Type	Description
ports	array	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
ports[]	object	ContainerPort represents a network port in a single container.
readinessProbe	object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
resizePolicy	array	Resources resize policy for the container.
resizePolicy[]	object	ContainerResizePolicy represents resource resize policy for the container.
resources	object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Property	Type	Description
restartPolicy	string	RestartPolicy defines the restart behavior of individual containers in a pod. This field may only be set for init containers, and the only allowed value is "Always". For non-init containers or when this field is not specified, the restart behavior is defined by the Pod's restart policy and the container type. Setting the RestartPolicy as "Always" for the init container will have the following effect: this init container will be continually restarted on exit until all regular containers have terminated. Once all regular containers have completed, all init containers with restartPolicy "Always" will be shut down. This lifecycle differs from normal init containers and is often referred to as a "sidecar" container. Although this init container still starts in the init container sequence, it does not wait for the container to complete before proceeding to the next init container. Instead, the next init container starts immediately after this init container is started, or after any startupProbe has successfully completed.
securityContext	object	SecurityContext defines the security options the container should be run with. If set, the fields of SecurityContext override the equivalent fields of PodSecurityContext. More info: https://kubernetes.io/docs/tasks/configure-pod-container/security-context/

Property	Type	Description
startupProbe	object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
stdinOnce	boolean	Whether the container runtime should close the stdin channel after it has been opened by a single attach. When stdin is true the stdin stream will remain open across multiple attach sessions. If stdinOnce is set to true, stdin is opened on container start, is empty until the first client attaches to stdin, and then remains open and accepts data until the client disconnects, at which time stdin is closed and remains closed until the container is restarted. If this flag is false, a container processes that reads from stdin will never receive an EOF. Default is false

Property	Type	Description
terminationMessagePath	string	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.
terminationMessagePolicy	string	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated.
tty	boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeDevices	array	volumeDevices is the list of block devices to be used by the container.
volumeDevices[]	object	volumeDevice describes a mapping of a raw block device within a container.
volumeMounts	array	Pod volumes to mount into the container's filesystem. Cannot be updated.

Property	Type	Description
volumeMounts[]	object	VolumeMount describes a mounting of a Volume within a container.
workingDir	string	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated.

2.1.147. .spec.containers[].env

Description

List of environment variables to set in the container. Cannot be updated.

Type

array

2.1.148. .spec.containers[].env[]

Description

EnvVar represents an environment variable present in a Container.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name of the environment variable. Must be a C_IDENTIFIER.

Property	Type	Description
value	string	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	object	Source for the environment variable's value. Cannot be used if value is not empty.

2.1.149. .spec.containers[].env[].valueFrom

Description

Source for the environment variable's value. Cannot be used if value is not empty.

Type

object

Property	Type	Description
configMapKeyRef	object	Selects a key of a ConfigMap.
fieldRef	object	Selects a field of the pod: supports metadata.name, metadata.namespace, metadata.labels['<KEY>'] , metadata.annotations['<KEY>'] , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.

Property	Type	Description
resourceFieldRef	object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, limits.ephemeral-storage, requests.cpu, requests.memory and requests.ephemeral-storage) are currently supported.
secretKeyRef	object	Selects a key of a secret in the pod's namespace

2.1.150. .spec.containers[].env[].valueFrom.configMapKeyRef

Description

Selects a key of a ConfigMap.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

2.1.151. .spec.containers[].env[].valueFrom.fieldRef

Description

Selects a field of the pod: supports metadata.name, metadata.namespace, **metadata.labels['<KEY>']**, **metadata.annotations['<KEY>']**, spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.

Type

object

Required

- **fieldPath**

Property	Type	Description
apiVersion	string	Version of the schema the FieldPath is written in terms of, defaults to "v1".
fieldPath	string	Path of the field to select in the specified API version.

2.1.152. .spec.containers[].env[].valueFrom.resourceFieldRef

Description

Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, limits.ephemeral-storage, requests.cpu, requests.memory and requests.ephemeral-storage) are currently supported.

Type

object

Required

- **resource**

Property	Type	Description
containerName	string	Container name: required for volumes, optional for env vars
divisor	integer-or-string	Specifies the output format of the exposed resources, defaults to "1"
resource	string	Required: resource to select

2.1.153. .spec.containers[].env[].valueFrom.secretKeyRef

Description

Selects a key of a secret in the pod's namespace

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.154. .spec.containers[].envFrom

Description

List of sources to populate environment variables in the container. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Type

array

2.1.155. .spec.containers[].envFrom[]

Description

EnvFromSource represents the source of a set of ConfigMaps or Secrets

Type

object

Property	Type	Description
configMapRef	object	The ConfigMap to select from
prefix	string	Optional text to prepend to the name of each environment variable. Must be a C_IDENTIFIER.
secretRef	object	The Secret to select from

2.1.156. .spec.containers[].envFrom[].configMapRef

Description

The ConfigMap to select from

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap must be defined

2.1.157. .spec.containers[].envFrom[].secretRef

Description

The Secret to select from

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret must be defined

2.1.158. .spec.containers[].lifecycle

Description

Actions that the management system should take in response to container lifecycle events. Cannot be updated.

Type
object

Property	Type	Description
postStart	object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
stopSignal	string	StopSignal defines which signal will be sent to a container when it is being stopped. If not specified, the default is defined by the container runtime in use. StopSignal can only be set for Pods with a non-empty .spec.os.name

2.1.159. .spec.containers[].lifecycle.postStart

Description

PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: <https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
sleep	object	Sleep represents a duration that the container should sleep.
tcpSocket	object	Deprecated. TCPSocket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

2.1.160. .spec.containers[].lifecycle.postStart.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

2.1.161. .spec.containers[].lifecycle.postStart.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.

Property	Type	Description
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

2.1.162. .spec.containers[].lifecycle.postStart.httpGet.httpHeaders

Description

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

2.1.163. .spec.containers[].lifecycle.postStart.httpGet.httpHeaders[]

Description

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

2.1.164. .spec.containers[].lifecycle.postStart.sleep

Description

Sleep represents a duration that the container should sleep.

Type

object

Required

- **seconds**

Property	Type	Description
seconds	integer	Seconds is the number of seconds to sleep.

2.1.165. .spec.containers[].lifecycle.postStart.tcpSocket**Description**

Deprecated. TCP Socket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

2.1.166. .spec.containers[].lifecycle.preStop**Description**

PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: <https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
sleep	object	Sleep represents a duration that the container should sleep.
tcpSocket	object	Deprecated. TCPSocket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

2.1.167. .spec.containers[].lifecycle.preStop.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

2.1.168. .spec.containers[].lifecycle.preStop.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

2.1.169. .spec.containers[].lifecycle.preStop.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

2.1.170. .spec.containers[].lifecycle.preStop.httpGet.httpHeaders[]**Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

2.1.171. .spec.containers[].lifecycle.preStop.sleep

Description

Sleep represents a duration that the container should sleep.

Type

object

Required

- **seconds**

Property	Type	Description
seconds	integer	Seconds is the number of seconds to sleep.

2.1.172. .spec.containers[].lifecycle.preStop.tcpSocket

Description

Deprecated. TCP Socket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.

Property	Type	Description
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

2.1.173. .spec.containers[].livenessProbe

Description

Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: <https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
failureThreshold	integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
grpc	object	GRPC specifies a GRPC HealthCheckRequest.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
initialDelaySeconds	integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.

Property	Type	Description
successThreshold	integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	object	TCPSocket specifies a connection to a TCP port.
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully upon probe failure. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. If this value is nil, the pod's terminationGracePeriodSeconds will be used. Otherwise, this value overrides the value provided by the pod spec. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). This is a beta field and requires enabling ProbeTerminationGracePeriod feature gate. Minimum value is 1. spec.terminationGracePeriodSeconds is used if unset.
timeoutSeconds	integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

2.1.174. .spec.containers[].livenessProbe.exec

Description

Exec specifies a command to execute in the container.

Type
object

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

2.1.175. .spec.containers[].livenessProbe.grpc

Description

GRPC specifies a GRPC HealthCheckRequest.

Type
object

Required

- **port**

Property	Type	Description
port	integer	Port number of the gRPC service. Number must be in the range 1 to 65535.
service	string	Service is the name of the service to place in the gRPC HealthCheckRequest (see https://github.com/grpc/grpc/blob/master/doc/health-checking.md). If this is not specified, the default behavior is defined by gRPC.

2.1.176. .spec.containers[].livenessProbe.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type**object****Required**

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

2.1.177. .spec.containers[].livenessProbe.httpGet.httpHeaders

Description

Custom headers to set in the request. HTTP allows repeated headers.

Type**array**

2.1.178. .spec.containers[].livenessProbe.httpGet.httpHeaders[]

Description

HTTPHeader describes a custom header to be used in HTTP probes

Type**object****Required**

- **name**

- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

2.1.179. .spec.containers[].livenessProbe.tcpSocket

Description

TCPSocket specifies a connection to a TCP port.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

2.1.180. .spec.containers[].ports

Description

List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See <https://github.com/kubernetes/kubernetes/issues/108255>. Cannot be updated.

Type

array

2.1.181. .spec.containers[].ports[]

Description

ContainerPort represents a network port in a single container.

Type

object

Required

- **containerPort**

Property	Type	Description
containerPort	integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
hostIP	string	What host IP to bind the external port to.
hostPort	integer	Number of port to expose on the host. If specified, this must be a valid port number, $0 < x < 65536$. If HostNetwork is specified, this must match ContainerPort. Most containers do not need this.
name	string	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services.
protocol	string	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP".

2.1.182. .spec.containers[].readinessProbe

Description

Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info:

<https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.

Property	Type	Description
failureThreshold	integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
grpc	object	GRPC specifies a GRPC HealthCheckRequest.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
initialDelaySeconds	integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	object	TCPSocket specifies a connection to a TCP port.

Property	Type	Description
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully upon probe failure. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. If this value is nil, the pod's terminationGracePeriodSeconds will be used. Otherwise, this value overrides the value provided by the pod spec. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). This is a beta field and requires enabling ProbeTerminationGracePeriod feature gate. Minimum value is 1. spec.terminationGracePeriodSeconds is used if unset.
timeoutSeconds	integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

2.1.183. .spec.containers[].readinessProbe.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

2.1.184. .spec.containers[].readinessProbe.grpc

Description

GRPC specifies a GRPC HealthCheckRequest.

Type

object

Required

- **port**

Property	Type	Description
port	integer	Port number of the gRPC service. Number must be in the range 1 to 65535.
service	string	Service is the name of the service to place in the gRPC HealthCheckRequest (see https://github.com/grpc/grpc/blob/master/doc/health-checking.md). If this is not specified, the default behavior is defined by gRPC.

2.1.185. .spec.containers[].readinessProbe.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

2.1.186. .spec.containers[].readinessProbe.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

2.1.187. .spec.containers[].readinessProbe.httpGet.httpHeaders[]**Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

2.1.188. .spec.containers[].readinessProbe.tcpSocket

Description

TCP socket specifies a connection to a TCP port.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

2.1.189. .spec.containers[].resizePolicy

Description

Resources resize policy for the container.

Type

array

2.1.190. .spec.containers[].resizePolicy[]

Description

ContainerResizePolicy represents resource resize policy for the container.

Type

object

Required

- **resourceName**

- **restartPolicy**

Property	Type	Description
resourceName	string	Name of the resource to which this resource resize policy applies. Supported values: cpu, memory.
restartPolicy	string	Restart policy to apply when specified resource is resized. If not specified, it defaults to NotRequired.

2.1.191. .spec.containers[].resources

Description

Compute Resources required by this container. Cannot be updated. More info: <https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/>

Type

object

Property	Type	Description
claims	array	Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate. This field is immutable. It can only be set for containers.
claims[]	object	ResourceClaim references one entry in PodSpec.ResourceClaims.
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Property	Type	Description
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

2.1.192. .spec.containers[].resources.claims

Description

Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate.

This field is immutable. It can only be set for containers.

Type

array

2.1.193. .spec.containers[].resources.claims[]

Description

ResourceClaim references one entry in PodSpec.ResourceClaims.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name must match the name of one entry in pod.spec.resourceClaims of the Pod where this field is used. It makes that resource available inside a container.

Property	Type	Description
request	string	Request is the name chosen for a request in the referenced claim. If empty, everything from the claim is made available, otherwise only the result of this request.

2.1.194. .spec.containers[].securityContext

Description

SecurityContext defines the security options the container should be run with. If set, the fields of SecurityContext override the equivalent fields of PodSecurityContext. More info:

<https://kubernetes.io/docs/tasks/configure-pod-container/security-context/>

Type

object

Property	Type	Description
allowPrivilegeEscalation	boolean	AllowPrivilegeEscalation controls whether a process can gain more privileges than its parent process. This bool directly controls if the no_new_privs flag will be set on the container process. AllowPrivilegeEscalation is true always when the container is: 1) run as Privileged 2) has CAP_SYS_ADMIN Note that this field cannot be set when spec.os.name is windows.
appArmorProfile	object	appArmorProfile is the AppArmor options to use by this container. If set, this profile overrides the pod's appArmorProfile. Note that this field cannot be set when spec.os.name is windows.
capabilities	object	The capabilities to add/drop when running containers. Defaults to the default set of capabilities granted by the container runtime. Note that this field cannot be set when spec.os.name is windows.

Property	Type	Description
privileged	boolean	Run container in privileged mode. Processes in privileged containers are essentially equivalent to root on the host. Defaults to false. Note that this field cannot be set when spec.os.name is windows.
procMount	string	procMount denotes the type of proc mount to use for the containers. The default value is Default which uses the container runtime defaults for readonly paths and masked paths. This requires the ProcMountType feature flag to be enabled. Note that this field cannot be set when spec.os.name is windows.
readOnlyRootFilesystem	boolean	Whether this container has a read-only root filesystem. Default is false. Note that this field cannot be set when spec.os.name is windows.
runAsGroup	integer	The GID to run the entrypoint of the container process. Uses runtime default if unset. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.
runAsNonRoot	boolean	Indicates that the container must run as a non-root user. If true, the Kubelet will validate the image at runtime to ensure that it does not run as UID 0 (root) and fail to start the container if it does. If unset or false, no such validation will be performed. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.

Property	Type	Description
runAsUser	integer	The UID to run the entrypoint of the container process. Defaults to user specified in image metadata if unspecified. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.
seLinuxOptions	object	The SELinux context to be applied to the container. If unspecified, the container runtime will allocate a random SELinux context for each container. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.
seccompProfile	object	The seccomp options to use by this container. If seccomp options are provided at both the pod & container level, the container options override the pod options. Note that this field cannot be set when spec.os.name is windows.
windowsOptions	object	The Windows specific settings applied to all containers. If unspecified, the options from the PodSecurityContext will be used. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is linux.

2.1.195. .spec.containers[].securityContext.appArmorProfile

Description

appArmorProfile is the AppArmor options to use by this container. If set, this profile overrides the pod's appArmorProfile. Note that this field cannot be set when spec.os.name is windows.

Type**object****Required**

- **type**

Property	Type	Description
localhostProfile	string	localhostProfile indicates a profile loaded on the node that should be used. The profile must be preconfigured on the node to work. Must match the loaded name of the profile. Must be set if and only if type is "Localhost".
type	string	type indicates which kind of AppArmor profile will be applied. Valid options are: Localhost - a profile pre-loaded on the node. RuntimeDefault - the container runtime's default profile. Unconfined - no AppArmor enforcement.

2.1.196. .spec.containers[].securityContext.capabilities**Description**

The capabilities to add/drop when running containers. Defaults to the default set of capabilities granted by the container runtime. Note that this field cannot be set when spec.os.name is windows.

Type**object**

Property	Type	Description
add	array (string)	Added capabilities
drop	array (string)	Removed capabilities

2.1.197. .spec.containers[].securityContext.seLinuxOptions**Description**

The SELinux context to be applied to the container. If unspecified, the container runtime will allocate a random SELinux context for each container. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.

Type

object

Property	Type	Description
level	string	Level is SELinux level label that applies to the container.
role	string	Role is a SELinux role label that applies to the container.
type	string	Type is a SELinux type label that applies to the container.
user	string	User is a SELinux user label that applies to the container.

2.1.198. .spec.containers[].securityContext.seccompProfile**Description**

The seccomp options to use by this container. If seccomp options are provided at both the pod & container level, the container options override the pod options. Note that this field cannot be set when spec.os.name is windows.

Type**object****Required**

- **type**

Property	Type	Description
localhostProfile	string	localhostProfile indicates a profile defined in a file on the node should be used. The profile must be preconfigured on the node to work. Must be a descending path, relative to the kubelet's configured seccomp profile location. Must be set if type is "Localhost". Must NOT be set for any other type.

Property	Type	Description
type	string	type indicates which kind of seccomp profile will be applied. Valid options are: Localhost - a profile defined in a file on the node should be used. RuntimeDefault - the container runtime default profile should be used. Unconfined - no profile should be applied.

2.1.199. .spec.containers[].securityContext.windowsOptions

Description

The Windows specific settings applied to all containers. If unspecified, the options from the PodSecurityContext will be used. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is linux.

Type

object

Property	Type	Description
gmsaCredentialSpec	string	GMSACredentialSpec is where the GMSA admission webhook (https://github.com/kubernetes-sigs/windows-gmsa) inlines the contents of the GMSA credential spec named by the GMSACredentialSpecName field.
gmsaCredentialSpecName	string	GMSACredentialSpecName is the name of the GMSA credential spec to use.
hostProcess	boolean	HostProcess determines if a container should be run as a 'Host Process' container. All of a Pod's containers must have the same effective HostProcess value (it is not allowed to have a mix of HostProcess containers and non-HostProcess containers). In addition, if HostProcess is true then HostNetwork must also be set to true.

Property	Type	Description
runAsUserName	string	The UserName in Windows to run the entrypoint of the container process. Defaults to the user specified in image metadata if unspecified. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.

2.1.200. .spec.containers[].startupProbe

Description

StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info:

<https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
failureThreshold	integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
grpc	object	GRPC specifies a GRPC HealthCheckRequest.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
initialDelaySeconds	integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Property	Type	Description
periodSeconds	integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	object	TCPSocket specifies a connection to a TCP port.
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully upon probe failure. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. If this value is nil, the pod's <code>terminationGracePeriodSeconds</code> will be used. Otherwise, this value overrides the value provided by the pod spec. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). This is a beta field and requires enabling <code>ProbeTerminationGracePeriod</code> feature gate. Minimum value is 1. <code>spec.terminationGracePeriodSeconds</code> is used if unset.
timeoutSeconds	integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

2.1.201. `.spec.containers[].startupProbe.exec`

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

2.1.202. .spec.containers[].startupProbe.grpc**Description**

GRPC specifies a GRPC HealthCheckRequest.

Type

object

Required

- **port**

Property	Type	Description
port	integer	Port number of the gRPC service. Number must be in the range 1 to 65535.
service	string	Service is the name of the service to place in the gRPC HealthCheckRequest (see https://github.com/grpc/grpc/blob/master/doc/health-checking.md). If this is not specified, the default behavior is defined by gRPC.

2.1.203. .spec.containers[].startupProbe.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

2.1.204. .spec.containers[].startupProbe.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

2.1.205. .spec.containers[].startupProbe.httpGet.httpHeaders[]**Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

2.1.206. .spec.containers[].startupProbe.tcpSocket**Description**

TCPSocket specifies a connection to a TCP port.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

2.1.207. .spec.containers[].volumeDevices**Description**

volumeDevices is the list of block devices to be used by the container.

Type

array

2.1.208. .spec.containers[].volumeDevices[]**Description**

volumeDevice describes a mapping of a raw block device within a container.

Type

object

Required

- **devicePath**
- **name**

Property	Type	Description
devicePath	string	devicePath is the path inside of the container that the device will be mapped to.
name	string	name must match the name of a persistentVolumeClaim in the pod

2.1.209. .spec.containers[].volumeMounts

Description

Pod volumes to mount into the container's filesystem. Cannot be updated.

Type

array

2.1.210. .spec.containers[].volumeMounts[]

Description

VolumeMount describes a mounting of a Volume within a container.

Type

object

Required

- **mountPath**
- **name**

Property	Type	Description
mountPath	string	Path within the container at which the volume should be mounted. Must not contain '.'.

Property	Type	Description
mountPropagation	string	mountPropagation determines how mounts are propagated from the host to container and the other way around. When not set, MountPropagationNone is used. This field is beta in 1.10. When RecursiveReadOnly is set to IfPossible or to Enabled, MountPropagation must be None or unspecified (which defaults to None).
name	string	This must match the Name of a Volume.
readOnly	boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
recursiveReadOnly	string	RecursiveReadOnly specifies whether read-only mounts should be handled recursively. If ReadOnly is false, this field has no meaning and must be unspecified. If ReadOnly is true, and this field is set to Disabled, the mount is not made recursively read-only. If this field is set to IfPossible, the mount is made recursively read-only, if it is supported by the container runtime. If this field is set to Enabled, the mount is made recursively read-only if it is supported by the container runtime, otherwise the pod will not be started and an error will be generated to indicate the reason. If this field is set to IfPossible or Enabled, MountPropagation must be set to None (or be unspecified, which defaults to None). If this field is not specified, it is treated as an equivalent of Disabled.

Property	Type	Description
subPath	string	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root).
subPathExpr	string	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

2.1.211. .spec.dnsConfig

Description

Defines the DNS configuration for the pods.

Type

object

Property	Type	Description
nameservers	array (string)	A list of DNS name server IP addresses. This will be appended to the base nameservers generated from DNSPolicy.
options	array	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Resolution options given in Options will override those that appear in the base DNSPolicy.
options[]	object	PodDNSConfigOption defines DNS resolver options of a pod.
searches	array (string)	A list of DNS search domains for host-name lookup. This will be appended to the base search paths generated from DNSPolicy.

2.1.212. .spec.dnsConfig.options

Description

A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Resolution options given in Options will override those that appear in the base DNSPolicy.

Type

array

2.1.213. .spec.dnsConfig.options[]**Description**

PodDNSConfigOption defines DNS resolver options of a pod.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name is required and must be unique.
value	string	Value is optional.

2.1.214. .spec.hostAliases**Description**

Pods' hostAliases configuration

Type

array

2.1.215. .spec.hostAliases[]**Description**

HostAlias holds the mapping between IP and hostnames that will be injected as an entry in the pod's hosts file.

Type

object

Required

- **hostnames**
- **ip**

Property	Type	Description
hostnames	array (string)	Hostnames for the above IP address.
ip	string	IP address of the host file entry.

2.1.216. .spec.imagePullSecrets

Description

An optional list of references to secrets in the same namespace to use for pulling prometheus and alertmanager images from registries see <https://kubernetes.io/docs/tasks/configure-pod-container/pull-image-private-registry/>

Type

array

2.1.217. .spec.imagePullSecrets[]

Description

LocalObjectReference contains enough information to let you locate the referenced object inside the same namespace.

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

2.1.218. .spec.initContainers

Description

InitContainers allows adding initContainers to the pod definition. Those can be used to e.g. fetch secrets for injection into the Alertmanager configuration from external sources. Any errors during the execution of an initContainer will lead to a restart of the Pod. More info: <https://kubernetes.io/docs/concepts/workloads/pods/init-containers/> InitContainers described here modify an operator generated init containers if they share the same name and modifications are done via a strategic merge patch. The current init container name is: **init-config-reloader**. Overriding init containers is entirely outside the scope of what the maintainers will support and by doing so, you accept that this behaviour may break at any time without notice.

Type**array****2.1.219. .spec.initContainers[]****Description**

A single application container that you want to run within a pod.

Type**object****Required**

- **name**

Property	Type	Description
args	array (string)	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$(VAR_NAME)" will produce the string literal "\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Property	Type	Description
command	array (string)	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$(VAR_NAME)" will produce the string literal "\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	array	List of environment variables to set in the container. Cannot be updated.
env[]	object	EnvVar represents an environment variable present in a Container.
envFrom	array	List of sources to populate environment variables in the container. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.
envFrom[]	object	EnvFromSource represents the source of a set of ConfigMaps or Secrets

Property	Type	Description
image	string	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
imagePullPolicy	string	Image pull policy. One of Always, Never, IfNotPresent. Defaults to Always if :latest tag is specified, or IfNotPresent otherwise. Cannot be updated. More info: https://kubernetes.io/docs/concepts/containers/images#updating-images
lifecycle	object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	string	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.

Property	Type	Description
ports	array	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
ports[]	object	ContainerPort represents a network port in a single container.
readinessProbe	object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
resizePolicy	array	Resources resize policy for the container.
resizePolicy[]	object	ContainerResizePolicy represents resource resize policy for the container.
resources	object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Property	Type	Description
restartPolicy	string	RestartPolicy defines the restart behavior of individual containers in a pod. This field may only be set for init containers, and the only allowed value is "Always". For non-init containers or when this field is not specified, the restart behavior is defined by the Pod's restart policy and the container type. Setting the RestartPolicy as "Always" for the init container will have the following effect: this init container will be continually restarted on exit until all regular containers have terminated. Once all regular containers have completed, all init containers with restartPolicy "Always" will be shut down. This lifecycle differs from normal init containers and is often referred to as a "sidecar" container. Although this init container still starts in the init container sequence, it does not wait for the container to complete before proceeding to the next init container. Instead, the next init container starts immediately after this init container is started, or after any startupProbe has successfully completed.
securityContext	object	SecurityContext defines the security options the container should be run with. If set, the fields of SecurityContext override the equivalent fields of PodSecurityContext. More info: https://kubernetes.io/docs/tasks/configure-pod-container/security-context/

Property	Type	Description
startupProbe	object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
stdinOnce	boolean	Whether the container runtime should close the stdin channel after it has been opened by a single attach. When stdin is true the stdin stream will remain open across multiple attach sessions. If stdinOnce is set to true, stdin is opened on container start, is empty until the first client attaches to stdin, and then remains open and accepts data until the client disconnects, at which time stdin is closed and remains closed until the container is restarted. If this flag is false, a container processes that reads from stdin will never receive an EOF. Default is false

Property	Type	Description
terminationMessagePath	string	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.
terminationMessagePolicy	string	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated.
tty	boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeDevices	array	volumeDevices is the list of block devices to be used by the container.
volumeDevices[]	object	volumeDevice describes a mapping of a raw block device within a container.
volumeMounts	array	Pod volumes to mount into the container's filesystem. Cannot be updated.

Property	Type	Description
volumeMounts[]	object	VolumeMount describes a mounting of a Volume within a container.
workingDir	string	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated.

2.1.220. .spec.initContainers[].env

Description

List of environment variables to set in the container. Cannot be updated.

Type

array

2.1.221. .spec.initContainers[].env[]

Description

EnvVar represents an environment variable present in a Container.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name of the environment variable. Must be a C_IDENTIFIER.

Property	Type	Description
value	string	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	object	Source for the environment variable's value. Cannot be used if value is not empty.

2.1.222. .spec.initContainers[].env[].valueFrom

Description

Source for the environment variable's value. Cannot be used if value is not empty.

Type

object

Property	Type	Description
configMapKeyRef	object	Selects a key of a ConfigMap.
fieldRef	object	Selects a field of the pod: supports metadata.name, metadata.namespace, metadata.labels['<KEY>'], metadata.annotations['<KEY>'], spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.

Property	Type	Description
resourceFieldRef	object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, limits.ephemeral-storage, requests.cpu, requests.memory and requests.ephemeral-storage) are currently supported.
secretKeyRef	object	Selects a key of a secret in the pod's namespace

2.1.223. .spec.initContainers[].env[].valueFrom.configMapKeyRef

Description

Selects a key of a ConfigMap.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

2.1.224. .spec.initContainers[].env[].valueFrom.fieldRef

Description

Selects a field of the pod: supports metadata.name, metadata.namespace, **metadata.labels['<KEY>']**, **metadata.annotations['<KEY>']**, spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.

Type**object****Required**

- **fieldPath**

Property	Type	Description
apiVersion	string	Version of the schema the FieldPath is written in terms of, defaults to "v1".
fieldPath	string	Path of the field to select in the specified API version.

2.1.225. .spec.initContainers[].env[].valueFrom.resourceFieldRef

Description

Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, limits.ephemeral-storage, requests.cpu, requests.memory and requests.ephemeral-storage) are currently supported.

Type**object****Required**

- **resource**

Property	Type	Description
containerName	string	Container name: required for volumes, optional for env vars
divisor	integer-or-string	Specifies the output format of the exposed resources, defaults to "1"
resource	string	Required: resource to select

2.1.226. .spec.initContainers[].env[].valueFrom.secretKeyRef

Description

Selects a key of a secret in the pod's namespace

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.227. .spec.initContainers[].envFrom

Description

List of sources to populate environment variables in the container. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Type

array

2.1.228. .spec.initContainers[].envFrom[]

Description

EnvFromSource represents the source of a set of ConfigMaps or Secrets

Type

object

Property	Type	Description
configMapRef	object	The ConfigMap to select from
prefix	string	Optional text to prepend to the name of each environment variable. Must be a C_IDENTIFIER.
secretRef	object	The Secret to select from

2.1.229. .spec.initContainers[].envFrom[].configMapRef

Description

The ConfigMap to select from

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap must be defined

2.1.230. .spec.initContainers[].envFrom[].secretRef

Description

The Secret to select from

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret must be defined

2.1.231. .spec.initContainers[].lifecycle

Description

Actions that the management system should take in response to container lifecycle events. Cannot be updated.

Type

object

Property	Type	Description
postStart	object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
stopSignal	string	StopSignal defines which signal will be sent to a container when it is being stopped. If not specified, the default is defined by the container runtime in use. StopSignal can only be set for Pods with a non-empty .spec.os.name

2.1.232. .spec.initContainers[].lifecycle.postStart

Description

PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: <https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
sleep	object	Sleep represents a duration that the container should sleep.
tcpSocket	object	Deprecated. TCPSocket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

2.1.233. .spec.initContainers[].lifecycle.postStart.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

2.1.234. .spec.initContainers[].lifecycle.postStart.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.

Property	Type	Description
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

2.1.235. .spec.initContainers[].lifecycle.postStart.httpGet.httpHeaders

Description

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

2.1.236. .spec.initContainers[].lifecycle.postStart.httpGet.httpHeaders[]

Description

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

2.1.237. .spec.initContainers[].lifecycle.postStart.sleep

Description

Sleep represents a duration that the container should sleep.

Type

object

Required

- **seconds**

Property	Type	Description
seconds	integer	Seconds is the number of seconds to sleep.

2.1.238. .spec.initContainers[].lifecycle.postStart.tcpSocket**Description**

Deprecated. TCPSocket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

2.1.239. .spec.initContainers[].lifecycle.preStop**Description**

PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: <https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
sleep	object	Sleep represents a duration that the container should sleep.
tcpSocket	object	Deprecated. TCPSocket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

2.1.240. .spec.initContainers[].lifecycle.preStop.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

2.1.241. .spec.initContainers[].lifecycle.preStop.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

2.1.242. .spec.initContainers[].lifecycle.preStop.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

2.1.243. .spec.initContainers[].lifecycle.preStop.httpGet.httpHeaders[]**Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

2.1.244. .spec.initContainers[].lifecycle.preStop.sleep

Description

Sleep represents a duration that the container should sleep.

Type

object

Required

- **seconds**

Property	Type	Description
seconds	integer	Seconds is the number of seconds to sleep.

2.1.245. .spec.initContainers[].lifecycle.preStop.tcpSocket

Description

Deprecated. TCP Socket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.

Property	Type	Description
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

2.1.246. .spec.initContainers[].livenessProbe

Description

Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: <https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
failureThreshold	integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
grpc	object	GRPC specifies a GRPC HealthCheckRequest.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
initialDelaySeconds	integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.

Property	Type	Description
successThreshold	integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	object	TCPSocket specifies a connection to a TCP port.
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully upon probe failure. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. If this value is nil, the pod's terminationGracePeriodSeconds will be used. Otherwise, this value overrides the value provided by the pod spec. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). This is a beta field and requires enabling ProbeTerminationGracePeriod feature gate. Minimum value is 1. spec.terminationGracePeriodSeconds is used if unset.
timeoutSeconds	integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

2.1.247. .spec.initContainers[].livenessProbe.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

2.1.248. .spec.initContainers[].livenessProbe.grpc

Description

GRPC specifies a GRPC HealthCheckRequest.

Type

object

Required

- **port**

Property	Type	Description
port	integer	Port number of the gRPC service. Number must be in the range 1 to 65535.
service	string	Service is the name of the service to place in the gRPC HealthCheckRequest (see https://github.com/grpc/grpc/blob/master/doc/health-checking.md). If this is not specified, the default behavior is defined by gRPC.

2.1.249. .spec.initContainers[].livenessProbe.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type**object****Required**

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

2.1.250. .spec.initContainers[].livenessProbe.httpGet.httpHeaders

Description

Custom headers to set in the request. HTTP allows repeated headers.

Type**array**

2.1.251. .spec.initContainers[].livenessProbe.httpGet.httpHeaders[]

Description

HTTPHeader describes a custom header to be used in HTTP probes

Type**object****Required**

- **name**

- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

2.1.252. .spec.initContainers[].livenessProbe.tcpSocket

Description

TCPSocket specifies a connection to a TCP port.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

2.1.253. .spec.initContainers[].ports

Description

List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See <https://github.com/kubernetes/kubernetes/issues/108255>. Cannot be updated.

Type

array

2.1.254. .spec.initContainers[].ports[]

Description

ContainerPort represents a network port in a single container.

Type

object

Required

- **containerPort**

Property	Type	Description
containerPort	integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
hostIP	string	What host IP to bind the external port to.
hostPort	integer	Number of port to expose on the host. If specified, this must be a valid port number, $0 < x < 65536$. If HostNetwork is specified, this must match ContainerPort. Most containers do not need this.
name	string	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services.
protocol	string	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP".

2.1.255. .spec.initContainers[].readinessProbe

Description

Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info:

<https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.

Property	Type	Description
failureThreshold	integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
grpc	object	GRPC specifies a GRPC HealthCheckRequest.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
initialDelaySeconds	integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	object	TCPSocket specifies a connection to a TCP port.

Property	Type	Description
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully upon probe failure. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. If this value is nil, the pod's terminationGracePeriodSeconds will be used. Otherwise, this value overrides the value provided by the pod spec. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). This is a beta field and requires enabling ProbeTerminationGracePeriod feature gate. Minimum value is 1. spec.terminationGracePeriodSeconds is used if unset.
timeoutSeconds	integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

2.1.256. .spec.initContainers[].readinessProbe.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

2.1.257. .spec.initContainers[].readinessProbe.grpc

Description

GRPC specifies a GRPC HealthCheckRequest.

Type

object

Required

- **port**

Property	Type	Description
port	integer	Port number of the gRPC service. Number must be in the range 1 to 65535.
service	string	Service is the name of the service to place in the gRPC HealthCheckRequest (see https://github.com/grpc/grpc/blob/master/doc/health-checking.md). If this is not specified, the default behavior is defined by gRPC.

2.1.258. .spec.initContainers[].readinessProbe.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

2.1.259. .spec.initContainers[].readinessProbe.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

2.1.260. .spec.initContainers[].readinessProbe.httpGet.httpHeaders[]**Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

2.1.261. `.spec.initContainers[].readinessProbe.tcpSocket`

Description

TCPSocket specifies a connection to a TCP port.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

2.1.262. `.spec.initContainers[].resizePolicy`

Description

Resources resize policy for the container.

Type

array

2.1.263. `.spec.initContainers[].resizePolicy[]`

Description

ContainerResizePolicy represents resource resize policy for the container.

Type

object

Required

- **resourceName**

- **restartPolicy**

Property	Type	Description
resourceName	string	Name of the resource to which this resource resize policy applies. Supported values: cpu, memory.
restartPolicy	string	Restart policy to apply when specified resource is resized. If not specified, it defaults to NotRequired.

2.1.264. .spec.initContainers[].resources

Description

Compute Resources required by this container. Cannot be updated. More info: <https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/>

Type

object

Property	Type	Description
claims	array	Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate. This field is immutable. It can only be set for containers.
claims[]	object	ResourceClaim references one entry in PodSpec.ResourceClaims.
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Property	Type	Description
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

2.1.265. .spec.initContainers[].resources.claims

Description

Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate.

This field is immutable. It can only be set for containers.

Type

array

2.1.266. .spec.initContainers[].resources.claims[]

Description

ResourceClaim references one entry in PodSpec.ResourceClaims.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name must match the name of one entry in pod.spec.resourceClaims of the Pod where this field is used. It makes that resource available inside a container.

Property	Type	Description
request	string	Request is the name chosen for a request in the referenced claim. If empty, everything from the claim is made available, otherwise only the result of this request.

2.1.267. .spec.initContainers[].securityContext

Description

SecurityContext defines the security options the container should be run with. If set, the fields of SecurityContext override the equivalent fields of PodSecurityContext. More info:

<https://kubernetes.io/docs/tasks/configure-pod-container/security-context/>

Type

object

Property	Type	Description
allowPrivilegeEscalation	boolean	AllowPrivilegeEscalation controls whether a process can gain more privileges than its parent process. This bool directly controls if the no_new_privs flag will be set on the container process. AllowPrivilegeEscalation is true always when the container is: 1) run as Privileged 2) has CAP_SYS_ADMIN Note that this field cannot be set when spec.os.name is windows.
appArmorProfile	object	appArmorProfile is the AppArmor options to use by this container. If set, this profile overrides the pod's appArmorProfile. Note that this field cannot be set when spec.os.name is windows.
capabilities	object	The capabilities to add/drop when running containers. Defaults to the default set of capabilities granted by the container runtime. Note that this field cannot be set when spec.os.name is windows.

Property	Type	Description
privileged	boolean	Run container in privileged mode. Processes in privileged containers are essentially equivalent to root on the host. Defaults to false. Note that this field cannot be set when spec.os.name is windows.
procMount	string	procMount denotes the type of proc mount to use for the containers. The default value is Default which uses the container runtime defaults for readonly paths and masked paths. This requires the ProcMountType feature flag to be enabled. Note that this field cannot be set when spec.os.name is windows.
readOnlyRootFilesystem	boolean	Whether this container has a read-only root filesystem. Default is false. Note that this field cannot be set when spec.os.name is windows.
runAsGroup	integer	The GID to run the entrypoint of the container process. Uses runtime default if unset. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.
runAsNonRoot	boolean	Indicates that the container must run as a non-root user. If true, the Kubelet will validate the image at runtime to ensure that it does not run as UID 0 (root) and fail to start the container if it does. If unset or false, no such validation will be performed. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.

Property	Type	Description
runAsUser	integer	The UID to run the entrypoint of the container process. Defaults to user specified in image metadata if unspecified. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.
seLinuxOptions	object	The SELinux context to be applied to the container. If unspecified, the container runtime will allocate a random SELinux context for each container. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.
seccompProfile	object	The seccomp options to use by this container. If seccomp options are provided at both the pod & container level, the container options override the pod options. Note that this field cannot be set when spec.os.name is windows.
windowsOptions	object	The Windows specific settings applied to all containers. If unspecified, the options from the PodSecurityContext will be used. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is linux.

2.1.268. .spec.initContainers[].securityContext.appArmorProfile

Description

appArmorProfile is the AppArmor options to use by this container. If set, this profile overrides the pod's appArmorProfile. Note that this field cannot be set when spec.os.name is windows.

Type**object****Required**

- **type**

Property	Type	Description
localhostProfile	string	localhostProfile indicates a profile loaded on the node that should be used. The profile must be preconfigured on the node to work. Must match the loaded name of the profile. Must be set if and only if type is "Localhost".
type	string	type indicates which kind of AppArmor profile will be applied. Valid options are: Localhost - a profile pre-loaded on the node. RuntimeDefault - the container runtime's default profile. Unconfined - no AppArmor enforcement.

2.1.269. .spec.initContainers[].securityContext.capabilities**Description**

The capabilities to add/drop when running containers. Defaults to the default set of capabilities granted by the container runtime. Note that this field cannot be set when spec.os.name is windows.

Type**object**

Property	Type	Description
add	array (string)	Added capabilities
drop	array (string)	Removed capabilities

2.1.270. .spec.initContainers[].securityContext.seLinuxOptions**Description**

The SELinux context to be applied to the container. If unspecified, the container runtime will allocate a random SELinux context for each container. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.

Type

object

Property	Type	Description
level	string	Level is SELinux level label that applies to the container.
role	string	Role is a SELinux role label that applies to the container.
type	string	Type is a SELinux type label that applies to the container.
user	string	User is a SELinux user label that applies to the container.

2.1.271. .spec.initContainers[].securityContext.seccompProfile**Description**

The seccomp options to use by this container. If seccomp options are provided at both the pod & container level, the container options override the pod options. Note that this field cannot be set when spec.os.name is windows.

Type**object****Required**

- **type**

Property	Type	Description
localhostProfile	string	localhostProfile indicates a profile defined in a file on the node should be used. The profile must be preconfigured on the node to work. Must be a descending path, relative to the kubelet's configured seccomp profile location. Must be set if type is "Localhost". Must NOT be set for any other type.

Property	Type	Description
type	string	type indicates which kind of seccomp profile will be applied. Valid options are: Localhost - a profile defined in a file on the node should be used. RuntimeDefault - the container runtime default profile should be used. Unconfined - no profile should be applied.

2.1.272. .spec.initContainers[].securityContext.windowsOptions

Description

The Windows specific settings applied to all containers. If unspecified, the options from the PodSecurityContext will be used. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is linux.

Type

object

Property	Type	Description
gmsaCredentialSpec	string	GMSACredentialSpec is where the GMSA admission webhook (https://github.com/kubernetes-sigs/windows-gmsa) inlines the contents of the GMSA credential spec named by the <code>GMSACredentialSpecName</code> field.
gmsaCredentialSpecName	string	GMSACredentialSpecName is the name of the GMSA credential spec to use.
hostProcess	boolean	HostProcess determines if a container should be run as a 'Host Process' container. All of a Pod's containers must have the same effective HostProcess value (it is not allowed to have a mix of HostProcess containers and non-HostProcess containers). In addition, if HostProcess is true then HostNetwork must also be set to true.

Property	Type	Description
runAsUserName	string	The UserName in Windows to run the entrypoint of the container process. Defaults to the user specified in image metadata if unspecified. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.

2.1.273. .spec.initContainers[].startupProbe

Description

StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info:

<https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
failureThreshold	integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
grpc	object	GRPC specifies a GRPC HealthCheckRequest.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
initialDelaySeconds	integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Property	Type	Description
periodSeconds	integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	object	TCPSocket specifies a connection to a TCP port.
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully upon probe failure. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. If this value is nil, the pod's <code>terminationGracePeriodSeconds</code> will be used. Otherwise, this value overrides the value provided by the pod spec. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). This is a beta field and requires enabling <code>ProbeTerminationGracePeriod</code> feature gate. Minimum value is 1. <code>spec.terminationGracePeriodSeconds</code> is used if unset.
timeoutSeconds	integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

2.1.274. `.spec.initContainers[].startupProbe.exec`

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

2.1.275. .spec.initContainers[].startupProbe.grpc**Description**

GRPC specifies a GRPC HealthCheckRequest.

Type

object

Required

- **port**

Property	Type	Description
port	integer	Port number of the gRPC service. Number must be in the range 1 to 65535.
service	string	Service is the name of the service to place in the gRPC HealthCheckRequest (see https://github.com/grpc/grpc/blob/master/doc/health-checking.md). If this is not specified, the default behavior is defined by gRPC.

2.1.276. .spec.initContainers[].startupProbe.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

2.1.277. .spec.initContainers[].startupProbe.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

2.1.278. .spec.initContainers[].startupProbe.httpGet.httpHeaders[]**Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

2.1.279. .spec.initContainers[].startupProbe.tcpSocket**Description**

TCPSocket specifies a connection to a TCP port.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

2.1.280. .spec.initContainers[].volumeDevices**Description**

volumeDevices is the list of block devices to be used by the container.

Type

array

2.1.281. .spec.initContainers[].volumeDevices[]**Description**

volumeDevice describes a mapping of a raw block device within a container.

Type**object****Required**

- **devicePath**
- **name**

Property	Type	Description
devicePath	string	devicePath is the path inside of the container that the device will be mapped to.
name	string	name must match the name of a persistentVolumeClaim in the pod

2.1.282. .spec.initContainers[].volumeMounts

Description

Pod volumes to mount into the container's filesystem. Cannot be updated.

Type**array**

2.1.283. .spec.initContainers[].volumeMounts[]

Description

VolumeMount describes a mounting of a Volume within a container.

Type**object****Required**

- **mountPath**
- **name**

Property	Type	Description
mountPath	string	Path within the container at which the volume should be mounted. Must not contain '.'.

Property	Type	Description
mountPropagation	string	mountPropagation determines how mounts are propagated from the host to container and the other way around. When not set, MountPropagationNone is used. This field is beta in 1.10. When RecursiveReadOnly is set to IfPossible or to Enabled, MountPropagation must be None or unspecified (which defaults to None).
name	string	This must match the Name of a Volume.
readOnly	boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
recursiveReadOnly	string	RecursiveReadOnly specifies whether read-only mounts should be handled recursively. If ReadOnly is false, this field has no meaning and must be unspecified. If ReadOnly is true, and this field is set to Disabled, the mount is not made recursively read-only. If this field is set to IfPossible, the mount is made recursively read-only, if it is supported by the container runtime. If this field is set to Enabled, the mount is made recursively read-only if it is supported by the container runtime, otherwise the pod will not be started and an error will be generated to indicate the reason. If this field is set to IfPossible or Enabled, MountPropagation must be set to None (or be unspecified, which defaults to None). If this field is not specified, it is treated as an equivalent of Disabled.

Property	Type	Description
subPath	string	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root).
subPathExpr	string	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

2.1.284. .spec.limits

Description

Defines the limits command line flags when starting Alertmanager.

Type

object

Property	Type	Description
maxPerSilenceBytes	string	The maximum size of an individual silence as stored on disk. This corresponds to the Alertmanager's --silences.max-per-silence-bytes flag. It requires Alertmanager $\geq$ v0.28.0.
maxSilences	integer	The maximum number active and pending silences. This corresponds to the Alertmanager's --silences.max-silences flag. It requires Alertmanager $\geq$ v0.28.0.

2.1.285. .spec.persistentVolumeClaimRetentionPolicy

Description

The field controls if and how PVCs are deleted during the lifecycle of a StatefulSet. The default behavior is all PVCs are retained. This is an alpha field from kubernetes 1.23 until 1.26 and a beta field from 1.26. It requires enabling the StatefulSetAutoDeletePVC feature gate.

Type

object

Property	Type	Description
whenDeleted	string	WhenDeleted specifies what happens to PVCs created from StatefulSet VolumeClaimTemplates when the StatefulSet is deleted. The default policy of Retain causes PVCs to not be affected by StatefulSet deletion. The Delete policy causes those PVCs to be deleted.
whenScaled	string	WhenScaled specifies what happens to PVCs created from StatefulSet VolumeClaimTemplates when the StatefulSet is scaled down. The default policy of Retain causes PVCs to not be affected by a scaledown. The Delete policy causes the associated PVCs for any excess pods above the replica count to be deleted.

2.1.286. .spec.podMetadata

Description

PodMetadata configures labels and annotations which are propagated to the Alertmanager pods. The following items are reserved and cannot be overridden: * "alertmanager" label, set to the name of the Alertmanager instance. * "app.kubernetes.io/instance" label, set to the name of the Alertmanager instance. * "app.kubernetes.io/managed-by" label, set to "prometheus-operator". * "app.kubernetes.io/name" label, set to "alertmanager". * "app.kubernetes.io/version" label, set to the Alertmanager version. * "kubectrl.kubernetes.io/default-container" annotation, set to "alertmanager".

Type

object

Property	Type	Description
annotations	object (string)	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations/

Property	Type	Description
labels	object (string)	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/
name	string	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/

2.1.287. .spec.resources

Description

Define resources requests and limits for single Pods.

Type

object

Property	Type	Description
claims	array	Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate. This field is immutable. It can only be set for containers.
claims[]	object	ResourceClaim references one entry in PodSpec.ResourceClaims.

Property	Type	Description
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

2.1.288. .spec.resources.claims

Description

Claims lists the names of resources, defined in `spec.resourceClaims`, that are used by this container. This is an alpha field and requires enabling the `DynamicResourceAllocation` feature gate.

This field is immutable. It can only be set for containers.

Type

array

2.1.289. .spec.resources.claims[]

Description

ResourceClaim references one entry in `PodSpec.ResourceClaims`.

Type

object

Required

- **name**

Property	Type	Description

Property	Type	Description
name	string	Name must match the name of one entry in <code>pod.spec.resourceClaims</code> of the Pod where this field is used. It makes that resource available inside a container.
request	string	Request is the name chosen for a request in the referenced claim. If empty, everything from the claim is made available, otherwise only the result of this request.

2.1.290. .spec.securityContext

Description

SecurityContext holds pod-level security attributes and common container settings. This defaults to the default PodSecurityContext.

Type

object

Property	Type	Description
appArmorProfile	object	<code>appArmorProfile</code> is the AppArmor options to use by the containers in this pod. Note that this field cannot be set when <code>spec.os.name</code> is windows.

Property	Type	Description
fsGroup	integer	A special supplemental group that applies to all containers in a pod. Some volume types allow the Kubelet to change the ownership of that volume to be owned by the pod: 1. The owning GID will be the FSGroup 2. The setgid bit is set (new files created in the volume will be owned by FSGroup) 3. The permission bits are OR'd with rw-rw---- If unset, the Kubelet will not modify the ownership and permissions of any volume. Note that this field cannot be set when spec.os.name is windows.
fsGroupChangePolicy	string	fsGroupChangePolicy defines behavior of changing ownership and permission of the volume before being exposed inside Pod. This field will only apply to volume types which support fsGroup based ownership (and permissions). It will have no effect on ephemeral volume types such as: secret, configmaps and emptydir. Valid values are "OnRootMismatch" and "Always". If not specified, "Always" is used. Note that this field cannot be set when spec.os.name is windows.
runAsGroup	integer	The GID to run the entrypoint of the container process. Uses runtime default if unset. May also be set in SecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence for that container. Note that this field cannot be set when spec.os.name is windows.

Property	Type	Description
runAsNonRoot	boolean	Indicates that the container must run as a non-root user. If true, the Kubelet will validate the image at runtime to ensure that it does not run as UID 0 (root) and fail to start the container if it does. If unset or false, no such validation will be performed. May also be set in SecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.
runAsUser	integer	The UID to run the entrypoint of the container process. Defaults to user specified in image metadata if unspecified. May also be set in SecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence for that container. Note that this field cannot be set when spec.os.name is windows.
seLinuxChangePolicy	string	seLinuxChangePolicy defines how the container's SELinux label is applied to all volumes used by the Pod. It has no effect on nodes that do not support SELinux or to volumes does not support SELinux. Valid values are "MountOption" and "Recursive". "Recursive" means relabeling of all files on all Pod volumes by the container runtime. This may be slow for large volumes, but allows mixing privileged and unprivileged Pods sharing the same volume on the same node. "MountOption" mounts all eligible Pod volumes with -o context mount option. This requires all Pods that share the same volume to use the same SELinux label. It is not possible to share the same volume among privileged and unprivileged Pods. Eligible volumes are in-tree FibreChannel and iSCSI volumes, and all CSI

Property	Type	Description
		volumes whose CSI driver announces SELinux support by setting <code>spec.seLinuxMount: true</code> in their <code>CSIDriver</code> instance. Other volumes are always re-labelled recursively. "MountOption" value is allowed only when SELinuxMount feature gate is enabled. If not specified and SELinuxMount feature gate is enabled, "MountOption" is used. If not specified and SELinuxMount feature gate is disabled, "MountOption" is used for <code>ReadWriteOncePod</code> volumes and "Recursive" for all other volumes. This field affects only Pods that have SELinux label set, either in <code>PodSecurityContext</code> or in <code>SecurityContext</code> of all containers. All Pods that use the same volume should use the same <code>seLinuxChangePolicy</code>, otherwise some pods can get stuck in <code>ContainerCreating</code> state. Note that this field cannot be set when <code>spec.os.name</code> is windows.
seLinuxOptions	object	The SELinux context to be applied to all containers. If unspecified, the container runtime will allocate a random SELinux context for each container. May also be set in <code>SecurityContext</code>. If set in both <code>SecurityContext</code> and <code>PodSecurityContext</code>, the value specified in <code>SecurityContext</code> takes precedence for that container. Note that this field cannot be set when <code>spec.os.name</code> is windows.
seccompProfile	object	The seccomp options to use by the containers in this pod. Note that this field cannot be set when <code>spec.os.name</code> is windows.

Property	Type	Description
supplementalGroups	array (integer)	A list of groups applied to the first process run in each container, in addition to the container's primary GID and fsGroup (if specified). If the SupplementalGroupsPolicy feature is enabled, the supplementalGroupsPolicy field determines whether these are in addition to or instead of any group memberships defined in the container image. If unspecified, no additional groups are added, though group memberships defined in the container image may still be used, depending on the supplementalGroupsPolicy field. Note that this field cannot be set when spec.os.name is windows.
supplementalGroupsPolicy	string	Defines how supplemental groups of the first container processes are calculated. Valid values are "Merge" and "Strict". If not specified, "Merge" is used. (Alpha) Using the field requires the SupplementalGroupsPolicy feature gate to be enabled and the container runtime must implement support for this feature. Note that this field cannot be set when spec.os.name is windows.
sysctls	array	Sysctls hold a list of namespaced sysctls used for the pod. Pods with unsupported sysctls (by the container runtime) might fail to launch. Note that this field cannot be set when spec.os.name is windows.
sysctls[]	object	Sysctl defines a kernel parameter to be set

Property	Type	Description
windowsOptions	object	The Windows specific settings applied to all containers. If unspecified, the options within a container's SecurityContext will be used. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is linux.

2.1.291. .spec.securityContext.appArmorProfile

Description

appArmorProfile is the AppArmor options to use by the containers in this pod. Note that this field cannot be set when spec.os.name is windows.

Type

object

Required

- **type**

Property	Type	Description
localhostProfile	string	localhostProfile indicates a profile loaded on the node that should be used. The profile must be preconfigured on the node to work. Must match the loaded name of the profile. Must be set if and only if type is "Localhost".
type	string	type indicates which kind of AppArmor profile will be applied. Valid options are: Localhost - a profile pre-loaded on the node. RuntimeDefault - the container runtime's default profile. Unconfined - no AppArmor enforcement.

2.1.292. .spec.securityContext.seLinuxOptions

Description

The SELinux context to be applied to all containers. If unspecified, the container runtime will allocate a random SELinux context for each container. May also be set in SecurityContext. If set in both

SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence for that container. Note that this field cannot be set when spec.os.name is windows.

Type**object**

Property	Type	Description
level	string	Level is SELinux level label that applies to the container.
role	string	Role is a SELinux role label that applies to the container.
type	string	Type is a SELinux type label that applies to the container.
user	string	User is a SELinux user label that applies to the container.

2.1.293. .spec.securityContext.seccompProfile

Description

The seccomp options to use by the containers in this pod. Note that this field cannot be set when spec.os.name is windows.

Type**object****Required**

- **type**

Property	Type	Description
localhostProfile	string	localhostProfile indicates a profile defined in a file on the node should be used. The profile must be preconfigured on the node to work. Must be a descending path, relative to the kubelet's configured seccomp profile location. Must be set if type is "Localhost". Must NOT be set for any other type.

Property	Type	Description
type	string	type indicates which kind of seccomp profile will be applied. Valid options are: Localhost - a profile defined in a file on the node should be used. RuntimeDefault - the container runtime default profile should be used. Unconfined - no profile should be applied.

2.1.294. .spec.securityContext.sysctls

Description

Sysctls hold a list of namespaced sysctls used for the pod. Pods with unsupported sysctls (by the container runtime) might fail to launch. Note that this field cannot be set when spec.os.name is windows.

Type

array

2.1.295. .spec.securityContext.sysctls[]

Description

Sysctl defines a kernel parameter to be set

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	Name of a property to set
value	string	Value of a property to set

2.1.296. .spec.securityContext.windowsOptions

Description

The Windows specific settings applied to all containers. If unspecified, the options within a container's SecurityContext will be used. If set in both SecurityContext and PodSecurityContext, the value

specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is linux.

Type

object

Property	Type	Description
gmsaCredentialSpec	string	GMSACredentialSpec is where the GMSA admission webhook (https://github.com/kubernetes-sigs/windows-gmsa) inlines the contents of the GMSA credential spec named by the <code>GMSACredentialSpecName</code> field.
gmsaCredentialSpecName	string	GMSACredentialSpecName is the name of the GMSA credential spec to use.
hostProcess	boolean	HostProcess determines if a container should be run as a 'Host Process' container. All of a Pod's containers must have the same effective HostProcess value (it is not allowed to have a mix of HostProcess containers and non-HostProcess containers). In addition, if HostProcess is true then HostNetwork must also be set to true.
runAsUserName	string	The UserName in Windows to run the entrypoint of the container process. Defaults to the user specified in image metadata if unspecified. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.

2.1.297. .spec.storage

Description

Storage is the definition of how storage will be used by the Alertmanager instances.

Type

object

Property	Type	Description
disableMountSubPath	boolean	Deprecated: subPath usage will be removed in a future release.
emptyDir	object	EmptyDirVolumeSource to be used by the StatefulSet. If specified, it takes precedence over ephemeral and volumeClaimTemplate . More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir
ephemeral	object	EphemeralVolumeSource to be used by the StatefulSet. This is a beta field in k8s 1.21 and GA in 1.15. For lower versions, starting with k8s 1.19, it requires enabling the GenericEphemeralVolume feature gate. More info: https://kubernetes.io/docs/concepts/storage/ephemeral-volumes/#generic-ephemeral-volumes
volumeClaimTemplate	object	Defines the PVC spec to be used by the Prometheus StatefulSets. The easiest way to use a volume that cannot be automatically provisioned is to use a label selector alongside manually created PersistentVolumes.

2.1.298. .spec.storage.emptyDir

Description

EmptyDirVolumeSource to be used by the StatefulSet. If specified, it takes precedence over **ephemeral** and **volumeClaimTemplate**. More info:

<https://kubernetes.io/docs/concepts/storage/volumes/#emptydir>

Type

object

Property	Type	Description

Property	Type	Description
medium	string	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	integer-or-string	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir

2.1.299. .spec.storage.ephemeral

Description

EphemeralVolumeSource to be used by the StatefulSet. This is a beta field in k8s 1.21 and GA in 1.15. For lower versions, starting with k8s 1.19, it requires enabling the GenericEphemeralVolume feature gate. More info: <https://kubernetes.io/docs/concepts/storage/ephemeral-volumes/#generic-ephemeral-volumes>

Type

object

Property	Type	Description

Property	Type	Description
volumeClaimTemplate	object	Will be used to create a stand-alone PVC to provision the volume. The pod in which this EphemeralVolumeSource is embedded will be the owner of the PVC, i.e. the PVC will be deleted together with the pod. The name of the PVC will be <pod name>-<volume name> where <volume name> is the name from the PodSpec.Volumes array entry. Pod validation will reject the pod if the concatenated name is not valid for a PVC (for example, too long). An existing PVC with that name that is not owned by the pod will not be used for the pod to avoid using an unrelated volume by mistake. Starting the pod is then blocked until the unrelated PVC is removed. If such a pre-created PVC is meant to be used by the pod, the PVC has to updated with an owner reference to the pod once the pod exists. Normally this should not be necessary, but it may be useful when manually reconstructing a broken cluster. This field is read-only and no changes will be made by Kubernetes to the PVC after it has been created. Required, must not be nil.

2.1.300. .spec.storage.ephemeral.volumeClaimTemplate

Description

Will be used to create a stand-alone PVC to provision the volume. The pod in which this EphemeralVolumeSource is embedded will be the owner of the PVC, i.e. the PVC will be deleted together with the pod. The name of the PVC will be **<pod name>-<volume name>** where **<volume name>** is the name from the **PodSpec.Volumes** array entry. Pod validation will reject the pod if the concatenated name is not valid for a PVC (for example, too long).

An existing PVC with that name that is not owned by the pod will **not** be used for the pod to avoid using an unrelated volume by mistake. Starting the pod is then blocked until the unrelated PVC is removed. If such a pre-created PVC is meant to be used by the pod, the PVC has to updated with an

owner reference to the pod once the pod exists. Normally this should not be necessary, but it may be useful when manually reconstructing a broken cluster.

This field is read-only and no changes will be made by Kubernetes to the PVC after it has been created.

Required, must not be nil.

Type

object

Required

- **spec**

Property	Type	Description
metadata	object	May contain labels and annotations that will be copied into the PVC when creating it. No other fields are allowed and will be rejected during validation.
spec	object	The specification for the PersistentVolumeClaim. The entire content is copied unchanged into the PVC that gets created from this template. The same fields as in a PersistentVolumeClaim are also valid here.

2.1.301. .spec.storage.ephemeral.volumeClaimTemplate.metadata

Description

May contain labels and annotations that will be copied into the PVC when creating it. No other fields are allowed and will be rejected during validation.

Type

object

2.1.302. .spec.storage.ephemeral.volumeClaimTemplate.spec

Description

The specification for the PersistentVolumeClaim. The entire content is copied unchanged into the PVC that gets created from this template. The same fields as in a PersistentVolumeClaim are also valid here.

Type

object

Property	Type	Description
accessModes	array (string)	accessModes contains the desired access modes the volume should have. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#access-modes-1
dataSource	object	dataSource field can be used to specify either: * An existing VolumeSnapshot object (snapshot.storage.k8s.io/VolumeSnapshot) * An existing PVC (PersistentVolumeClaim) If the provisioner or an external controller can support the specified data source, it will create a new volume based on the contents of the specified data source. When the AnyVolumeDataSource feature gate is enabled, dataSource contents will be copied to dataSourceRef, and dataSourceRef contents will be copied to dataSource when dataSourceRef.namespace is not specified. If the namespace is specified, then dataSourceRef will not be copied to dataSource.

Property	Type	Description
dataSourceRef	object	dataSourceRef specifies the object from which to populate the volume with data, if a non-empty volume is desired. This may be any object from a non-empty API group (non core object) or a PersistentVolumeClaim object. When this field is specified, volume binding will only succeed if the type of the specified object matches some installed volume populator or dynamic provisioner. This field will replace the functionality of the dataSource field and as such if both fields are non-empty, they must have the same value. For backwards compatibility, when namespace isn't specified in dataSourceRef, both fields (dataSource and dataSourceRef) will be set to the same value automatically if one of them is empty and the other is non-empty. When namespace is specified in dataSourceRef, dataSource isn't set to the same value and must be empty. There are three important differences between dataSource and dataSourceRef: * - While dataSource only allows two specific types of objects, dataSourceRef allows any non-core object, as well as PersistentVolumeClaim objects. * - While dataSource ignores disallowed values (dropping them), dataSourceRef preserves all values, and generates an error if a disallowed value is specified. * - While dataSource only allows local objects, dataSourceRef allows objects in any namespaces. (Beta) Using this field requires the AnyVolumeDataSource feature gate to be enabled. (Alpha) Using the namespace field of dataSourceRef requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

Property	Type	Description
resources	object	resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources
selector	object	selector is a label query over volumes to consider for binding.
storageClassName	string	storageClassName is the name of the StorageClass required by the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#class-1

Property	Type	Description
volumeAttributesClassName	string	volumeAttributesClassName may be used to set the VolumeAttributesClass used by this claim. If specified, the CSI driver will create or update the volume with the attributes defined in the corresponding VolumeAttributesClass. This has a different purpose than storageClassName, it can be changed after the claim is created. An empty string value means that no VolumeAttributesClass will be applied to the claim but it's not allowed to reset this field to empty string once it is set. If unspecified and the PersistentVolumeClaim is unbound, the default VolumeAttributesClass will be set by the persistentvolume controller if it exists. If the resource referred to by volumeAttributesClass does not exist, this PersistentVolumeClaim will be set to a Pending state, as reflected by the modifyVolumeStatus field, until such as a resource exists. More info: https://kubernetes.io/docs/concepts/storage/volume-attributes-classes/ (Beta) Using this field requires the VolumeAttributesClass feature gate to be enabled (off by default).
volumeMode	string	volumeMode defines what type of volume is required by the claim. Value of Filesystem is implied when not included in claim spec.
volumeName	string	volumeName is the binding reference to the PersistentVolume backing this claim.

2.1.303. .spec.storage.ephemeral.volumeClaimTemplate.spec.dataSource

Description

dataSource field can be used to specify either: * An existing VolumeSnapshot object (snapshot.storage.k8s.io/VolumeSnapshot) * An existing PVC (PersistentVolumeClaim) If the provisioner or an external controller can support the specified data source, it will create a new volume based on the contents of the specified data source. When the AnyVolumeDataSource feature gate is enabled, dataSource contents will be copied to dataSourceRef, and dataSourceRef contents will be copied to dataSource when dataSourceRef.namespace is not specified. If the namespace is specified, then dataSourceRef will not be copied to dataSource.

Type

object

Required

- **kind**
- **name**

Property	Type	Description
apiGroup	string	APIGroup is the group for the resource being referenced. If APIGroup is not specified, the specified Kind must be in the core API group. For any other third-party types, APIGroup is required.
kind	string	Kind is the type of resource being referenced
name	string	Name is the name of resource being referenced

2.1.304. .spec.storage.ephemeral.volumeClaimTemplate.spec.dataSourceRef

Description

dataSourceRef specifies the object from which to populate the volume with data, if a non-empty volume is desired. This may be any object from a non-empty API group (non core object) or a PersistentVolumeClaim object. When this field is specified, volume binding will only succeed if the type of the specified object matches some installed volume populator or dynamic provisioner. This field will replace the functionality of the dataSource field and as such if both fields are non-empty, they must have the same value. For backwards compatibility, when namespace isn't specified in dataSourceRef, both fields (dataSource and dataSourceRef) will be set to the same value automatically if one of them is empty and the other is non-empty. When namespace is specified in dataSourceRef, dataSource isn't set to the same value and must be empty. There are three important differences between dataSource and dataSourceRef: * While dataSource only allows two specific types of objects, dataSourceRef allows any non-core object, as well as PersistentVolumeClaim objects. * While dataSource ignores disallowed values (dropping them), dataSourceRef preserves all values, and generates an error if a disallowed value is specified. * While dataSource only allows local objects, dataSourceRef allows objects in any namespaces. (Beta) Using this field requires the AnyVolumeDataSource feature gate to be enabled. (Alpha) Using the namespace field of dataSourceRef requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

Type**object****Required**

- **kind**
- **name**

Property	Type	Description
apiGroup	string	APIGroup is the group for the resource being referenced. If APIGroup is not specified, the specified Kind must be in the core API group. For any other third-party types, APIGroup is required.
kind	string	Kind is the type of resource being referenced
name	string	Name is the name of resource being referenced
namespace	string	Namespace is the namespace of resource being referenced Note that when a namespace is specified, a gateway.networking.k8s.io/ReferenceGrant object is required in the referent namespace to allow that namespace's owner to accept the reference. See the ReferenceGrant documentation for details. (Alpha) This field requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

2.1.305. .spec.storage.ephemeral.volumeClaimTemplate.spec.resources**Description**

resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: <https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources>

Type**object**

Property	Type	Description
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

2.1.306. .spec.storage.ephemeral.volumeClaimTemplate.spec.selector

Description

selector is a label query over volumes to consider for binding.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

2.1.307. .spec.storage.ephemeral.volumeClaimTemplate.spec.selector.matchExpressic

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

2.1.308. .spec.storage.ephemeral.volumeClaimTemplate.spec.selector.matchExpressic**Description**

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

2.1.309. .spec.storage.volumeClaimTemplate**Description**

Defines the PVC spec to be used by the Prometheus StatefulSets. The easiest way to use a volume that cannot be automatically provisioned is to use a label selector alongside manually created PersistentVolumes.

Type

object

Property	Type	Description
apiVersion	string	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	string	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	object	EmbeddedMetadata contains metadata relevant to an EmbeddedResource.
spec	object	Defines the desired characteristics of a volume requested by a pod author. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
status	object	Deprecated: this field is never set.

2.1.310. .spec.storage.volumeClaimTemplate.metadata

Description

EmbeddedMetadata contains metadata relevant to an EmbeddedResource.

Type

object

Property	Type	Description

Property	Type	Description
annotations	object (string)	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations/
labels	object (string)	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/
name	string	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/

2.1.311. .spec.storage.volumeClaimTemplate.spec

Description

Defines the desired characteristics of a volume requested by a pod author. More info: <https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims>

Type

object

Property	Type	Description

Property	Type	Description
accessModes	array (string)	accessModes contains the desired access modes the volume should have. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#access-modes-1
dataSource	object	dataSource field can be used to specify either: * An existing VolumeSnapshot object (snapshot.storage.k8s.io/VolumeSnapshot) * An existing PVC (PersistentVolumeClaim) If the provisioner or an external controller can support the specified data source, it will create a new volume based on the contents of the specified data source. When the AnyVolumeDataSource feature gate is enabled, dataSource contents will be copied to dataSourceRef, and dataSourceRef contents will be copied to dataSource when dataSourceRef.namespace is not specified. If the namespace is specified, then dataSourceRef will not be copied to dataSource.

Property	Type	Description
dataSourceRef	object	dataSourceRef specifies the object from which to populate the volume with data, if a non-empty volume is desired. This may be any object from a non-empty API group (non core object) or a PersistentVolumeClaim object. When this field is specified, volume binding will only succeed if the type of the specified object matches some installed volume populator or dynamic provisioner. This field will replace the functionality of the dataSource field and as such if both fields are non-empty, they must have the same value. For backwards compatibility, when namespace isn't specified in dataSourceRef, both fields (dataSource and dataSourceRef) will be set to the same value automatically if one of them is empty and the other is non-empty. When namespace is specified in dataSourceRef, dataSource isn't set to the same value and must be empty. There are three important differences between dataSource and dataSourceRef: * While dataSource only allows two specific types of objects, dataSourceRef allows any non-core object, as well as PersistentVolumeClaim objects. * While dataSource ignores disallowed values (dropping them), dataSourceRef preserves all values, and generates an error if a disallowed value is specified. * While dataSource only allows local objects, dataSourceRef allows objects in any namespaces. (Beta) Using this field requires the AnyVolumeDataSource feature gate to be enabled. (Alpha) Using the namespace field of dataSourceRef requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

Property	Type	Description
resources	object	resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources
selector	object	selector is a label query over volumes to consider for binding.
storageClassName	string	storageClassName is the name of the StorageClass required by the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#class-1

Property	Type	Description
volumeAttributesClassName	string	volumeAttributesClassName may be used to set the VolumeAttributesClass used by this claim. If specified, the CSI driver will create or update the volume with the attributes defined in the corresponding VolumeAttributesClass. This has a different purpose than storageClassName, it can be changed after the claim is created. An empty string value means that no VolumeAttributesClass will be applied to the claim but it's not allowed to reset this field to empty string once it is set. If unspecified and the PersistentVolumeClaim is unbound, the default VolumeAttributesClass will be set by the persistentvolume controller if it exists. If the resource referred to by volumeAttributesClass does not exist, this PersistentVolumeClaim will be set to a Pending state, as reflected by the modifyVolumeStatus field, until such as a resource exists. More info: https://kubernetes.io/docs/concepts/storage/volume-attributes-classes/ (Beta) Using this field requires the VolumeAttributesClass feature gate to be enabled (off by default).
volumeMode	string	volumeMode defines what type of volume is required by the claim. Value of Filesystem is implied when not included in claim spec.
volumeName	string	volumeName is the binding reference to the PersistentVolume backing this claim.

2.1.312. .spec.storage.volumeClaimTemplate.spec.dataSource

Description

dataSource field can be used to specify either: * An existing VolumeSnapshot object (snapshot.storage.k8s.io/VolumeSnapshot) * An existing PVC (PersistentVolumeClaim) If the provisioner or an external controller can support the specified data source, it will create a new volume based on the contents of the specified data source. When the AnyVolumeDataSource feature gate is enabled, dataSource contents will be copied to dataSourceRef, and dataSourceRef contents will be copied to dataSource when dataSourceRef.namespace is not specified. If the namespace is specified, then dataSourceRef will not be copied to dataSource.

Type

object

Required

- **kind**
- **name**

Property	Type	Description
apiGroup	string	APIGroup is the group for the resource being referenced. If APIGroup is not specified, the specified Kind must be in the core API group. For any other third-party types, APIGroup is required.
kind	string	Kind is the type of resource being referenced
name	string	Name is the name of resource being referenced

2.1.313. .spec.storage.volumeClaimTemplate.spec.dataSourceRef

Description

dataSourceRef specifies the object from which to populate the volume with data, if a non-empty volume is desired. This may be any object from a non-empty API group (non core object) or a PersistentVolumeClaim object. When this field is specified, volume binding will only succeed if the type of the specified object matches some installed volume populator or dynamic provisioner. This field will replace the functionality of the dataSource field and as such if both fields are non-empty, they must have the same value. For backwards compatibility, when namespace isn't specified in dataSourceRef, both fields (dataSource and dataSourceRef) will be set to the same value automatically if one of them is empty and the other is non-empty. When namespace is specified in dataSourceRef, dataSource isn't set to the same value and must be empty. There are three important differences between dataSource and dataSourceRef: * While dataSource only allows two specific types of objects, dataSourceRef allows any non-core object, as well as PersistentVolumeClaim objects. * While dataSource ignores disallowed values (dropping them), dataSourceRef preserves all values, and generates an error if a disallowed value is specified. * While dataSource only allows local objects, dataSourceRef allows objects in any namespaces. (Beta) Using this field requires the AnyVolumeDataSource feature gate to be enabled. (Alpha) Using the namespace field of dataSourceRef requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

Type**object****Required**

- **kind**
- **name**

Property	Type	Description
apiGroup	string	APIGroup is the group for the resource being referenced. If APIGroup is not specified, the specified Kind must be in the core API group. For any other third-party types, APIGroup is required.
kind	string	Kind is the type of resource being referenced
name	string	Name is the name of resource being referenced
namespace	string	Namespace is the namespace of resource being referenced Note that when a namespace is specified, a gateway.networking.k8s.io/ReferenceGrant object is required in the referent namespace to allow that namespace's owner to accept the reference. See the ReferenceGrant documentation for details. (Alpha) This field requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

2.1.314. .spec.storage.volumeClaimTemplate.spec.resources**Description**

resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: <https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources>

Type**object**

Property	Type	Description
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

2.1.315. .spec.storage.volumeClaimTemplate.spec.selector

Description

selector is a label query over volumes to consider for binding.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

2.1.316. .spec.storage.volumeClaimTemplate.spec.selector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

2.1.317. .spec.storage.volumeClaimTemplate.spec.selector.matchExpressions[]**Description**

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

2.1.318. .spec.storage.volumeClaimTemplate.status**Description**

Deprecated: this field is never set.

Type

object

Property	Type	Description

Property	Type	Description
accessModes	array (string)	accessModes contains the actual access modes the volume backing the PVC has. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#access-modes-1
allocatedResourceStatuses	object (string)	allocatedResourceStatuses stores status of resource being resized for the given PVC. Key names follow standard Kubernetes label syntax. Valid values are either: * Un-prefixed keys: - storage - the capacity of the volume. * Custom resources must use implementation-defined prefixed names such as "example.com/my-custom-resource" Apart from above values - keys that are unprefixed or have kubernetes.io prefix are considered reserved and hence may not be used. ClaimResourceStatus can be in any of following states: - ControllerResizeInProgress: State set when resize controller starts resizing the volume in control-plane. - ControllerResizeFailed: State set when resize has failed in resize controller with a terminal error. - NodeResizePending: State set when resize controller has finished resizing the volume but further resizing of volume is needed on the node. - NodeResizeInProgress: State set when kubelet starts resizing the volume. - NodeResizeFailed: State set when resizing has failed in kubelet with a terminal error. Transient errors don't set NodeResizeFailed. For example: if expanding a PVC for more capacity - this field can be one of the following states: - pvc.status.allocatedResourceStatus['storage'] = "ControllerResizeInProgress" - pvc.status.allocatedResourceStatus['storage'] =

Property	Type	Description
		"ControllerResizeFailed" - pvc.status.allocatedResourceStatus['storage'] = "NodeResizePending" - pvc.status.allocatedResourceStatus['storage'] = "NodeResizeInProgress" - pvc.status.allocatedResourceStatus['storage'] = "NodeResizeFailed" When this field is not set, it means that no resize operation is in progress for the given PVC. A controller that receives PVC update with previously unknown resourceName or ClaimResourceStatus should ignore the update for the purpose it was designed. For example - a controller that only is responsible for resizing capacity of the volume, should ignore PVC updates that change other valid resources associated with PVC. This is an alpha field and requires enabling RecoverVolumeExpansionFailure feature.

Property	Type	Description
allocatedResources	integer-or-string	allocatedResources tracks the resources allocated to a PVC including its capacity. Key names follow standard Kubernetes label syntax. Valid values are either: * Un-prefixed keys: - storage - the capacity of the volume. * Custom resources must use implementation-defined prefixed names such as "example.com/my-custom-resource" Apart from above values - keys that are unprefixed or have kubernetes.io prefix are considered reserved and hence may not be used. Capacity reported here may be larger than the actual capacity when a volume expansion operation is requested. For storage quota, the larger value from allocatedResources and PVC.spec.resources is used. If allocatedResources is not set, PVC.spec.resources alone is used for quota calculation. If a volume expansion capacity request is lowered, allocatedResources is only lowered if there are no expansion operations in progress and if the actual volume capacity is equal or lower than the requested capacity. A controller that receives PVC update with previously unknown resourceName should ignore the update for the purpose it was designed. For example - a controller that only is responsible for resizing capacity of the volume, should ignore PVC updates that change other valid resources associated with PVC. This is an alpha field and requires enabling RecoverVolumeExpansionFailure feature.
capacity	integer-or-string	capacity represents the actual resources of the underlying volume.

Property	Type	Description
conditions	array	conditions is the current Condition of persistent volume claim. If underlying persistent volume is being resized then the Condition will be set to 'Resizing'.
conditions[]	object	PersistentVolumeClaimCondition contains details about state of pvc
currentVolumeAttributesClassName	string	currentVolumeAttributesClassName is the current name of the VolumeAttributesClass the PVC is using. When unset, there is no VolumeAttributeClass applied to this PersistentVolumeClaim This is a beta field and requires enabling VolumeAttributesClass feature (off by default).
modifyVolumeStatus	object	ModifyVolumeStatus represents the status object of ControllerModifyVolume operation. When this is unset, there is no ModifyVolume operation being attempted. This is a beta field and requires enabling VolumeAttributesClass feature (off by default).
phase	string	phase represents the current phase of PersistentVolumeClaim.

2.1.319. .spec.storage.volumeClaimTemplate.status.conditions

Description

conditions is the current Condition of persistent volume claim. If underlying persistent volume is being resized then the Condition will be set to 'Resizing'.

Type

array

2.1.320. .spec.storage.volumeClaimTemplate.status.conditions[]

Description

PersistentVolumeClaimCondition contains details about state of pvc

Type

object

Required

- **status**
- **type**

Property	Type	Description
lastProbeTime	string	lastProbeTime is the time we probed the condition.
lastTransitionTime	string	lastTransitionTime is the time the condition transitioned from one status to another.
message	string	message is the human-readable message indicating details about last transition.
reason	string	reason is a unique, this should be a short, machine understandable string that gives the reason for condition's last transition. If it reports "Resizing" that means the underlying persistent volume is being resized.
status	string	Status is the status of the condition. Can be True, False, Unknown. More info: https://kubernetes.io/docs/reference/kubernetes-api/config-and-storage-resources/persistent-volume-claim-v1/#:~:text=state%20of%20pvc-,conditions.status,-(string)%2C%20required
type	string	Type is the type of the condition. More info: https://kubernetes.io/docs/reference/kubernetes-api/config-and-storage-resources/persistent-volume-claim-v1/#:~:text=set%20to%20%27ResizedStarted%27.-,PersistentVolumeClaimCondition,-contains%20details%20about

2.1.321. .spec.storage.volumeClaimTemplate.status.modifyVolumeStatus

Description

ModifyVolumeStatus represents the status object of ControllerModifyVolume operation. When this is unset, there is no ModifyVolume operation being attempted. This is a beta field and requires enabling VolumeAttributesClass feature (off by default).

Type

object

Required

- **status**

Property	Type	Description
status	string	status is the status of the ControllerModifyVolume operation. It can be in any of following states: - Pending Pending indicates that the PersistentVolumeClaim cannot be modified due to unmet requirements, such as the specified VolumeAttributesClass not existing. - InProgress InProgress indicates that the volume is being modified. - Infeasible Infeasible indicates that the request has been rejected as invalid by the CSI driver. To resolve the error, a valid VolumeAttributesClass needs to be specified. Note: New statuses can be added in the future. Consumers should check for unknown statuses and fail appropriately.
targetVolumeAttributesClassName	string	targetVolumeAttributesClassName is the name of the VolumeAttributesClass the PVC currently being reconciled

2.1.322. .spec.tolerations**Description**

If specified, the pod's tolerations.

Type

array

2.1.323. .spec.tolerations[]**Description**

The pod this Toleration is attached to tolerates any taint that matches the triple <key,value,effect> using the matching operator <operator>.

Type

object

Property	Type	Description
effect	string	Effect indicates the taint effect to match. Empty means match all taint effects. When specified, allowed values are NoSchedule, PreferNoSchedule and NoExecute.
key	string	Key is the taint key that the toleration applies to. Empty means match all taint keys. If the key is empty, operator must be Exists; this combination means to match all values and all keys.
operator	string	Operator represents a key's relationship to the value. Valid operators are Exists and Equal. Defaults to Equal. Exists is equivalent to wildcard for value, so that a pod can tolerate all taints of a particular category.
tolerationSeconds	integer	TolerationSeconds represents the period of time the toleration (which must be of effect NoExecute, otherwise this field is ignored) tolerates the taint. By default, it is not set, which means tolerate the taint forever (do not evict). Zero and negative values will be treated as 0 (evict immediately) by the system.
value	string	Value is the taint value the toleration matches to. If the operator is Exists, the value should be empty, otherwise just a regular string.

2.1.324. .spec.topologySpreadConstraints

Description

If specified, the pod's topology spread constraints.

Type

array**2.1.325. .spec.topologySpreadConstraints[]****Description**

TopologySpreadConstraint specifies how to spread matching pods among the given topology.

Type**object****Required**

- **maxSkew**
- **topologyKey**
- **whenUnsatisfiable**

Property	Type	Description
labelSelector	object	LabelSelector is used to find matching pods. Pods that match this label selector are counted to determine the number of pods in their corresponding topology domain.
matchLabelKeys	array (string)	MatchLabelKeys is a set of pod label keys to select the pods over which spreading will be calculated. The keys are used to lookup values from the incoming pod labels, those key-value labels are ANDed with labelSelector to select the group of existing pods over which spreading will be calculated for the incoming pod. The same key is forbidden to exist in both MatchLabelKeys and LabelSelector. MatchLabelKeys cannot be set when LabelSelector isn't set. Keys that don't exist in the incoming pod labels will be ignored. A null or empty list means only match against labelSelector. This is a beta field and requires the <code>MatchLabelKeysInPodTopologySpread</code> feature gate to be enabled (enabled by default).

Property	Type	Description
maxSkew	integer	MaxSkew describes the degree to which pods may be unevenly distributed. When whenUnsatisfiable=DoNotSchedule, it is the maximum permitted difference between the number of matching pods in the target topology and the global minimum. The global minimum is the minimum number of matching pods in an eligible domain or zero if the number of eligible domains is less than MinDomains. For example, in a 3-zone cluster, MaxSkew is set to 1, and pods with the same labelSelector spread as 2/2/1: In this case, the global minimum is 1. zone1 zone2 zone3 P P P P P - if MaxSkew is 1, incoming pod can only be scheduled to zone3 to become 2/2/2; scheduling it onto zone1(zone2) would make the ActualSkew(3-1) on zone1(zone2) violate MaxSkew(1). - if MaxSkew is 2, incoming pod can be scheduled onto any zone. When whenUnsatisfiable=ScheduleAnyway, it is used to give higher precedence to topologies that satisfy it. It's a required field. Default value is 1 and 0 is not allowed.

Property	Type	Description
minDomains	integer	MinDomains indicates a minimum number of eligible domains. When the number of eligible domains with matching topology keys is less than minDomains, Pod Topology Spread treats "global minimum" as 0, and then the calculation of Skew is performed. And when the number of eligible domains with matching topology keys equals or greater than minDomains, this value has no effect on scheduling. As a result, when the number of eligible domains is less than minDomains, scheduler won't schedule more than maxSkew Pods to those domains. If value is nil, the constraint behaves as if MinDomains is equal to 1. Valid values are integers greater than 0. When value is not nil, WhenUnsatisfiable must be DoNotSchedule. For example, in a 3-zone cluster, MaxSkew is set to 2, MinDomains is set to 5 and pods with the same labelSelector spread as 2/2/2: zone1 zone2 zone3 P P P P P P The number of domains is less than 5(MinDomains), so "global minimum" is treated as 0. In this situation, new pod with the same labelSelector cannot be scheduled, because computed skew will be 3(3 - 0) if new Pod is scheduled to any of the three zones, it will violate MaxSkew.

Property	Type	Description
nodeAffinityPolicy	string	NodeAffinityPolicy indicates how we will treat Pod's nodeAffinity/nodeSelector when calculating pod topology spread skew. Options are: - Honor: only nodes matching nodeAffinity/nodeSelector are included in the calculations. - Ignore: nodeAffinity/nodeSelector are ignored. All nodes are included in the calculations. If this value is nil, the behavior is equivalent to the Honor policy.
nodeTaintsPolicy	string	NodeTaintsPolicy indicates how we will treat node taints when calculating pod topology spread skew. Options are: - Honor: nodes without taints, along with tainted nodes for which the incoming pod has a toleration, are included. - Ignore: node taints are ignored. All nodes are included. If this value is nil, the behavior is equivalent to the Ignore policy.
topologyKey	string	TopologyKey is the key of node labels. Nodes that have a label with this key and identical values are considered to be in the same topology. We consider each <key, value> as a "bucket", and try to put balanced number of pods into each bucket. We define a domain as a particular instance of a topology. Also, we define an eligible domain as a domain whose nodes meet the requirements of nodeAffinityPolicy and nodeTaintsPolicy. e.g. If TopologyKey is "kubernetes.io/hostname", each Node is a domain of that topology. And, if TopologyKey is "topology.kubernetes.io/zone", each zone is a domain of that topology. It's a required field.

Property	Type	Description
whenUnsatisfiable	string	WhenUnsatisfiable indicates how to deal with a pod if it doesn't satisfy the spread constraint. - DoNotSchedule (default) tells the scheduler not to schedule it. - ScheduleAnyway tells the scheduler to schedule the pod in any location, but giving higher precedence to topologies that would help reduce the skew. A constraint is considered "Unsatisfiable" for an incoming pod if and only if every possible node assignment for that pod would violate "MaxSkew" on some topology. For example, in a 3-zone cluster, MaxSkew is set to 1, and pods with the same labelSelector spread as 3/1/1: zone1 zone2 zone3 P P P P P If WhenUnsatisfiable is set to DoNotSchedule, incoming pod can only be scheduled to zone2(zone3) to become 3/2/1(3/1/2) as ActualSkew(2-1) on zone2(zone3) satisfies MaxSkew(1). In other words, the cluster can still be imbalanced, but scheduler won't make it more imbalanced. It's a required field.

2.1.326. .spec.topologySpreadConstraints[].labelSelector

Description

LabelSelector is used to find matching pods. Pods that match this label selector are counted to determine the number of pods in their corresponding topology domain.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Property	Type	Description
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

2.1.327. .spec.topologySpreadConstraints[].labelSelector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

2.1.328. .spec.topologySpreadConstraints[].labelSelector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

2.1.329. .spec.volumeMounts

Description

VolumeMounts allows configuration of additional VolumeMounts on the output StatefulSet definition. VolumeMounts specified will be appended to other VolumeMounts in the alertmanager container, that are generated as a result of StorageSpec objects.

Type

array

2.1.330. .spec.volumeMounts[]

Description

VolumeMount describes a mounting of a Volume within a container.

Type

object

Required

- **mountPath**
- **name**

Property	Type	Description
mountPath	string	Path within the container at which the volume should be mounted. Must not contain '.

Property	Type	Description
mountPropagation	string	mountPropagation determines how mounts are propagated from the host to container and the other way around. When not set, MountPropagationNone is used. This field is beta in 1.10. When RecursiveReadOnly is set to IfPossible or to Enabled, MountPropagation must be None or unspecified (which defaults to None).
name	string	This must match the Name of a Volume.
readOnly	boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
recursiveReadOnly	string	RecursiveReadOnly specifies whether read-only mounts should be handled recursively. If ReadOnly is false, this field has no meaning and must be unspecified. If ReadOnly is true, and this field is set to Disabled, the mount is not made recursively read-only. If this field is set to IfPossible, the mount is made recursively read-only, if it is supported by the container runtime. If this field is set to Enabled, the mount is made recursively read-only if it is supported by the container runtime, otherwise the pod will not be started and an error will be generated to indicate the reason. If this field is set to IfPossible or Enabled, MountPropagation must be set to None (or be unspecified, which defaults to None). If this field is not specified, it is treated as an equivalent of Disabled.

Property	Type	Description
subPath	string	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root).
subPathExpr	string	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

2.1.331. .spec.volumes

Description

Volumes allows configuration of additional volumes on the output StatefulSet definition. Volumes specified will be appended to other volumes that are generated as a result of StorageSpec objects.

Type

array

2.1.332. .spec.volumes[]

Description

Volume represents a named volume in a pod that may be accessed by any container in the pod.

Type

object

Required

- **name**

Property	Type	Description

Property	Type	Description
awsElasticBlockStore	object	awsElasticBlockStore represents an AWS Disk resource that is attached to a kubelet's host machine and then exposed to the pod. Deprecated: AWSElasticBlockStore is deprecated. All operations for the in-tree awsElasticBlockStore type are redirected to the ebs.csi.aws.com CSI driver. More info: https://kubernetes.io/docs/concepts/storage/volumes#awselasticblockstore
azureDisk	object	azureDisk represents an Azure Data Disk mount on the host and bind mount to the pod. Deprecated: AzureDisk is deprecated. All operations for the in-tree azureDisk type are redirected to the disk.csi.azure.com CSI driver.
azureFile	object	azureFile represents an Azure File Service mount on the host and bind mount to the pod. Deprecated: AzureFile is deprecated. All operations for the in-tree azureFile type are redirected to the file.csi.azure.com CSI driver.
cephfs	object	cephFS represents a Ceph FS mount on the host that shares a pod's lifetime. Deprecated: CephFS is deprecated and the in-tree cephfs type is no longer supported.
cinder	object	cinder represents a cinder volume attached and mounted on kubelets host machine. Deprecated: Cinder is deprecated. All operations for the in-tree cinder type are redirected to the cinder.csi.openstack.org CSI driver. More info: https://examples.k8s.io/mysql-cinder-pd/README.md

Property	Type	Description
configMap	object	configMap represents a configMap that should populate this volume
csi	object	csi (Container Storage Interface) represents ephemeral storage that is handled by certain external CSI drivers.
downwardAPI	object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir

Property	Type	Description
ephemeral	object	ephemeral represents a volume that is handled by a cluster storage driver. The volume's lifecycle is tied to the pod that defines it - it will be created before the pod starts, and deleted when the pod is removed. Use this if: a) the volume is only needed while the pod runs, b) features of normal volumes like restoring from snapshot or capacity tracking are needed, c) the storage driver is specified through a storage class, and d) the storage driver supports dynamic volume provisioning through a PersistentVolumeClaim (see EphemeralVolumeSource for more information on the connection between this volume type and PersistentVolumeClaim). Use PersistentVolumeClaim or one of the vendor-specific APIs for volumes that persist for longer than the lifecycle of an individual pod. Use CSI for light-weight local ephemeral volumes if the CSI driver is meant to be used that way - see the documentation of the driver for more information. A pod can use both types of ephemeral volumes and persistent volumes at the same time.
fc	object	fc represents a Fibre Channel resource that is attached to a kubelet's host machine and then exposed to the pod.
flexVolume	object	flexVolume represents a generic volume resource that is provisioned/attached using an exec based plugin. Deprecated: FlexVolume is deprecated. Consider using a CSIDriver instead.

Property	Type	Description
flocker	object	flocker represents a Flocker volume attached to a kubelet's host machine. This depends on the Flocker control service being running. Deprecated: Flocker is deprecated and the in-tree flocker type is no longer supported.
gcePersistentDisk	object	gcePersistentDisk represents a GCE Disk resource that is attached to a kubelet's host machine and then exposed to the pod. Deprecated: GCEPersistentDisk is deprecated. All operations for the in-tree gcePersistentDisk type are redirected to the pd.csi.storage.gke.io CSI driver. More info: https://kubernetes.io/docs/concepts/storage/volumes#gcepersistentdisk
gitRepo	object	gitRepo represents a git repository at a particular revision. Deprecated: GitRepo is deprecated. To provision a container with a git repo, mount an EmptyDir into an InitContainer that clones the repo using git, then mount the EmptyDir into the Pod's container.
glusterfs	object	glusterfs represents a Glusterfs mount on the host that shares a pod's lifetime. Deprecated: Glusterfs is deprecated and the in-tree glusterfs type is no longer supported. More info: https://examples.k8s.io/volumes/glusterfs/README.md

Property	Type	Description
hostPath	object	hostPath represents a pre-existing file or directory on the host machine that is directly exposed to the container. This is generally used for system agents or other privileged things that are allowed to see the host machine. Most containers will NOT need this. More info: https://kubernetes.io/docs/concepts/storage/volumes#hostpath
image	object	image represents an OCI object (a container image or artifact) pulled and mounted on the kubelet's host machine. The volume is resolved at pod startup depending on which PullPolicy value is provided: - Always: the kubelet always attempts to pull the reference. Container creation will fail if the pull fails. - Never: the kubelet never pulls the reference and only uses a local image or artifact. Container creation will fail if the reference isn't present. - IfNotPresent: the kubelet pulls if the reference isn't already present on disk. Container creation will fail if the reference isn't present and the pull fails. The volume gets re-resolved if the pod gets deleted and recreated, which means that new remote content will become available on pod recreation. A failure to resolve or pull the image during pod startup will block containers from starting and may add significant latency. Failures will be retried using normal volume backoff and will be reported on the pod reason and message. The types of objects that may be mounted by this volume are defined by the container runtime implementation on a host machine and at minimum must include all valid

Property	Type	Description
		types supported by the container image field. The OCI object gets mounted in a single directory (spec.containers[].volumeMounts.mountPath) by merging the manifest layers in the same way as for container images. The volume will be mounted read-only (ro) and non-executable files (noexec). Sub path mounts for containers are not supported (spec.containers[].volumeMounts.subpath) before 1.33. The field spec.securityContext.fsGroupChangePolicy has no effect on this volume type.
iscsi	object	iscsi represents an ISCSI Disk resource that is attached to a kubelet's host machine and then exposed to the pod. More info: https://examples.k8s.io/volumes/iscsi/README.md
name	string	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
nfs	object	nfs represents an NFS mount on the host that shares a pod's lifetime More info: https://kubernetes.io/docs/concepts/storage/volumes#nfs
persistentVolumeClaim	object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
photonPersistentDisk	object	photonPersistentDisk represents a PhotonController persistent disk attached and mounted on kubelets host machine. Deprecated: PhotonPersistentDisk is deprecated and the in-tree photonPersistentDisk type is no longer supported.

Property	Type	Description
portworxVolume	object	portworxVolume represents a portworx volume attached and mounted on kubelets host machine. Deprecated: PortworxVolume is deprecated. All operations for the in-tree portworxVolume type are redirected to the pxd.portworx.com CSI driver when the CSIMigrationPortworx feature-gate is on.
projected	object	projected items for all in one resources secrets, configmaps, and downward API
quobyte	object	quobyte represents a Quobyte mount on the host that shares a pod's lifetime. Deprecated: Quobyte is deprecated and the in-tree quobyte type is no longer supported.
rbd	object	rbd represents a Rados Block Device mount on the host that shares a pod's lifetime. Deprecated: RBD is deprecated and the in-tree rbd type is no longer supported. More info: https://examples.k8s.io/volumes/rbd/README.md
scaleIO	object	scaleIO represents a ScaleIO persistent volume attached and mounted on Kubernetes nodes. Deprecated: ScaleIO is deprecated and the in-tree scaleIO type is no longer supported.
secret	object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Property	Type	Description
storageos	object	storageOS represents a StorageOS volume attached and mounted on Kubernetes nodes. Deprecated: StorageOS is deprecated and the in-tree storageos type is no longer supported.
vsphereVolume	object	vsphereVolume represents a vSphere volume attached and mounted on kubelets host machine. Deprecated: VsphereVolume is deprecated. All operations for the in-tree vsphereVolume type are redirected to the csi.vsphere.vmware.com CSI driver.

2.1.333. .spec.volumes[].awsElasticBlockStore

Description

awsElasticBlockStore represents an AWS Disk resource that is attached to a kubelet's host machine and then exposed to the pod. Deprecated: AWSElasticBlockStore is deprecated. All operations for the in-tree awsElasticBlockStore type are redirected to the ebs.csi.aws.com CSI driver. More info: <https://kubernetes.io/docs/concepts/storage/volumes#awselasticblockstore>

Type

object

Required

- **volumeID**

Property	Type	Description
fsType	string	fsType is the filesystem type of the volume that you want to mount. Tip: Ensure that the filesystem type is supported by the host operating system. Examples: "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified. More info: https://kubernetes.io/docs/concepts/storage/volumes#awselasticblockstore

Property	Type	Description
partition	integer	partition is the partition in the volume that you want to mount. If omitted, the default is to mount by volume name. Examples: For volume /dev/sda1, you specify the partition as "1". Similarly, the volume partition for /dev/sda is "0" (or you can leave the property empty).
readOnly	boolean	readOnly value true will force the readOnly setting in VolumeMounts. More info: https://kubernetes.io/docs/concepts/storage/volumes#awselasticsearchblockstore
volumeID	string	volumeID is unique ID of the persistent disk resource in AWS (Amazon EBS volume). More info: https://kubernetes.io/docs/concepts/storage/volumes#awselasticsearchblockstore

2.1.334. .spec.volumes[].azureDisk

Description

azureDisk represents an Azure Data Disk mount on the host and bind mount to the pod. Deprecated: AzureDisk is deprecated. All operations for the in-tree azureDisk type are redirected to the disk.csi.azure.com CSI driver.

Type

object

Required

- **diskName**
- **diskURI**

Property	Type	Description
cachingMode	string	cachingMode is the Host Caching mode: None, Read Only, Read Write.

Property	Type	Description
diskName	string	diskName is the Name of the data disk in the blob storage
diskURI	string	diskURI is the URI of data disk in the blob storage
fsType	string	fsType is Filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified.
kind	string	kind expected values are Shared: multiple blob disks per storage account Dedicated: single blob disk per storage account Managed: azure managed data disk (only in managed availability set). defaults to shared
readOnly	boolean	readOnly Defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.

2.1.335. .spec.volumes[].azureFile

Description

azureFile represents an Azure File Service mount on the host and bind mount to the pod.

Deprecated: AzureFile is deprecated. All operations for the in-tree azureFile type are redirected to the file.csi.azure.com CSI driver.

Type

object

Required

- **secretName**
- **shareName**

Property	Type	Description

Property	Type	Description
readOnly	boolean	readOnly defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.
secretName	string	secretName is the name of secret that contains Azure Storage Account Name and Key
shareName	string	shareName is the azure share Name

2.1.336. .spec.volumes[].cephfs

Description

cephFS represents a Ceph FS mount on the host that shares a pod's lifetime. Deprecated: CephFS is deprecated and the in-tree cephfs type is no longer supported.

Type

object

Required

- **monitors**

Property	Type	Description
monitors	array (string)	monitors is Required: Monitors is a collection of Ceph monitors More info: https://examples.k8s.io/volumes/cephfs/README.md#how-to-use-it
path	string	path is Optional: Used as the mounted root, rather than the full Ceph tree, default is /
readOnly	boolean	readOnly is Optional: Defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts. More info: https://examples.k8s.io/volumes/cephfs/README.md#how-to-use-it

Property	Type	Description
secretFile	string	secretFile is Optional: SecretFile is the path to key ring for User, default is /etc/ceph/user.secret More info: https://examples.k8s.io/volumes/cephfs/README.md#how-to-use-it
secretRef	object	secretRef is Optional: SecretRef is reference to the authentication secret for User, default is empty. More info: https://examples.k8s.io/volumes/cephfs/README.md#how-to-use-it
user	string	user is optional: User is the rados user name, default is admin More info: https://examples.k8s.io/volumes/cephfs/README.md#how-to-use-it

2.1.337. .spec.volumes[].cephfs.secretRef

Description

secretRef is Optional: SecretRef is reference to the authentication secret for User, default is empty.
More info: <https://examples.k8s.io/volumes/cephfs/README.md#how-to-use-it>

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

2.1.338. .spec.volumes[].cinder

Description

cinder represents a cinder volume attached and mounted on kubelets host machine. Deprecated:

Cinder is deprecated. All operations for the in-tree cinder type are redirected to the cinder.csi.openstack.org CSI driver. More info: <https://examples.k8s.io/mysql-cinder-pd/README.md>

Type

object

Required

- **volumeID**

Property	Type	Description
fsType	string	fsType is the filesystem type to mount. Must be a filesystem type supported by the host operating system. Examples: "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified. More info: https://examples.k8s.io/mysql-cinder-pd/README.md
readOnly	boolean	readOnly defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts. More info: https://examples.k8s.io/mysql-cinder-pd/README.md
secretRef	object	secretRef is optional: points to a secret object containing parameters used to connect to OpenStack.
volumeID	string	volumeID used to identify the volume in cinder. More info: https://examples.k8s.io/mysql-cinder-pd/README.md

2.1.339. .spec.volumes[].cinder.secretRef

Description

secretRef is optional: points to a secret object containing parameters used to connect to OpenStack.

Type

object

Property	Type	Description

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

2.1.340. .spec.volumes[].configMap

Description

configMap represents a configMap that should populate this volume

Type

object

Property	Type	Description
defaultMode	integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Property	Type	Description
items	array	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.
items[]	object	Maps a string key to a path within a volume.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	optional specify whether the ConfigMap or its keys must be defined

2.1.341. .spec.volumes[].configMap.items

Description

items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.

Type

array

2.1.342. .spec.volumes[].configMap.items[]

Description

Maps a string key to a path within a volume.

Type

object

Required

- **key**
- **path**

Property	Type	Description
key	string	key is the key to project.
mode	integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	string	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

2.1.343. .spec.volumes[].csi

Description

csi (Container Storage Interface) represents ephemeral storage that is handled by certain external CSI drivers.

Type

object

Required

- **driver**

Property	Type	Description
driver	string	driver is the name of the CSI driver that handles this volume. Consult with your admin for the correct name as registered in the cluster.
fsType	string	fsType to mount. Ex. "ext4", "xfs", "ntfs". If not provided, the empty value is passed to the associated CSI driver which will determine the default filesystem to apply.
nodePublishSecretRef	object	nodePublishSecretRef is a reference to the secret object containing sensitive information to pass to the CSI driver to complete the CSI NodePublishVolume and NodeUnpublishVolume calls. This field is optional, and may be empty if no secret is required. If the secret object contains more than one secret, all secret references are passed.
readOnly	boolean	readOnly specifies a read-only configuration for the volume. Defaults to false (read/write).
volumeAttributes	object (string)	volumeAttributes stores driver-specific properties that are passed to the CSI driver. Consult your driver's documentation for supported values.

2.1.344. .spec.volumes[].csi.nodePublishSecretRef

Description

nodePublishSecretRef is a reference to the secret object containing sensitive information to pass to the CSI driver to complete the CSI NodePublishVolume and NodeUnpublishVolume calls. This field is optional, and may be empty if no secret is required. If the secret object contains more than one secret, all secret references are passed.

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

2.1.345. .spec.volumes[].downwardAPI

Description

downwardAPI represents downward API about the pod that should populate this volume

Type

object

Property	Type	Description
defaultMode	integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	array	Items is a list of downward API volume file
items[]	object	DownwardAPIVolumeFile represents information to create the file containing the pod field

2.1.346. .spec.volumes[].downwardAPI.items

Description

Items is a list of downward API volume file

Type

array

2.1.347. .spec.volumes[].downwardAPI.items[]

Description

DownwardAPIVolumeFile represents information to create the file containing the pod field

Type

object

Required

- **path**

Property	Type	Description
fieldRef	object	Required: Selects a field of the pod: only annotations, labels, name, namespace and uid are supported.
mode	integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	string	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

2.1.348. .spec.volumes[].downwardAPI.items[].fieldRef

Description

Required: Selects a field of the pod: only annotations, labels, name, namespace and uid are supported.

Type

object

Required

- **fieldPath**

Property	Type	Description
apiVersion	string	Version of the schema the FieldPath is written in terms of, defaults to "v1".
fieldPath	string	Path of the field to select in the specified API version.

2.1.349. .spec.volumes[].downwardAPI.items[].resourceFieldRef

Description

Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Type

object

Required

- **resource**

Property	Type	Description
containerName	string	Container name: required for volumes, optional for env vars
divisor	integer-or-string	Specifies the output format of the exposed resources, defaults to "1"
resource	string	Required: resource to select

2.1.350. .spec.volumes[].emptyDir

Description

emptyDir represents a temporary directory that shares a pod's lifetime. More info:
<https://kubernetes.io/docs/concepts/storage/volumes#emptydir>

Type

object

Property	Type	Description
medium	string	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	integer-or-string	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir

2.1.351. .spec.volumes[].ephemeral

Description

ephemeral represents a volume that is handled by a cluster storage driver. The volume's lifecycle is tied to the pod that defines it - it will be created before the pod starts, and deleted when the pod is removed.

Use this if: a) the volume is only needed while the pod runs, b) features of normal volumes like restoring from snapshot or capacity tracking are needed, c) the storage driver is specified through a storage class, and d) the storage driver supports dynamic volume provisioning through a PersistentVolumeClaim (see EphemeralVolumeSource for more information on the connection between this volume type and PersistentVolumeClaim).

Use PersistentVolumeClaim or one of the vendor-specific APIs for volumes that persist for longer than the lifecycle of an individual pod.

Use CSI for light-weight local ephemeral volumes if the CSI driver is meant to be used that way - see the documentation of the driver for more information.

A pod can use both types of ephemeral volumes and persistent volumes at the same time.

Type

object

Property	Type	Description
volumeClaimTemplate	object	Will be used to create a stand-alone PVC to provision the volume. The pod in which this EphemeralVolumeSource is embedded will be the owner of the PVC, i.e. the PVC will be deleted together with the pod. The name of the PVC will be <pod name>-<volume name> where <volume name> is the name from the PodSpec.Volumes array entry. Pod validation will reject the pod if the concatenated name is not valid for a PVC (for example, too long). An existing PVC with that name that is not owned by the pod will not be used for the pod to avoid using an unrelated volume by mistake. Starting the pod is then blocked until the unrelated PVC is removed. If such a pre-created PVC is meant to be used by the pod, the PVC has to updated with an owner reference to the pod once the pod exists. Normally this should not be necessary, but it may be useful when manually reconstructing a broken cluster. This field is read-only and no changes will be made by Kubernetes to the PVC after it has been created. Required, must not be nil.

2.1.352. .spec.volumes[].ephemeral.volumeClaimTemplate**Description**

Will be used to create a stand-alone PVC to provision the volume. The pod in which this EphemeralVolumeSource is embedded will be the owner of the PVC, i.e. the PVC will be deleted together with the pod. The name of the PVC will be **<pod name>-<volume name>** where **<volume name>** is the name from the **PodSpec.Volumes** array entry. Pod validation will reject the pod if the concatenated name is not valid for a PVC (for example, too long).

An existing PVC with that name that is not owned by the pod will **not** be used for the pod to avoid using an unrelated volume by mistake. Starting the pod is then blocked until the unrelated PVC is removed. If such a pre-created PVC is meant to be used by the pod, the PVC has to updated with an

owner reference to the pod once the pod exists. Normally this should not be necessary, but it may be useful when manually reconstructing a broken cluster.

This field is read-only and no changes will be made by Kubernetes to the PVC after it has been created.

Required, must not be nil.

Type

object

Required

- **spec**

Property	Type	Description
metadata	object	May contain labels and annotations that will be copied into the PVC when creating it. No other fields are allowed and will be rejected during validation.
spec	object	The specification for the PersistentVolumeClaim. The entire content is copied unchanged into the PVC that gets created from this template. The same fields as in a PersistentVolumeClaim are also valid here.

2.1.353. `.spec.volumes[].ephemeral.volumeClaimTemplate.metadata`

Description

May contain labels and annotations that will be copied into the PVC when creating it. No other fields are allowed and will be rejected during validation.

Type

object

2.1.354. `.spec.volumes[].ephemeral.volumeClaimTemplate.spec`

Description

The specification for the PersistentVolumeClaim. The entire content is copied unchanged into the PVC that gets created from this template. The same fields as in a PersistentVolumeClaim are also valid here.

Type

object

Property	Type	Description
accessModes	array (string)	accessModes contains the desired access modes the volume should have. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#access-modes-1
dataSource	object	dataSource field can be used to specify either: * An existing VolumeSnapshot object (snapshot.storage.k8s.io/VolumeSnapshot) * An existing PVC (PersistentVolumeClaim) If the provisioner or an external controller can support the specified data source, it will create a new volume based on the contents of the specified data source. When the AnyVolumeDataSource feature gate is enabled, dataSource contents will be copied to dataSourceRef, and dataSourceRef contents will be copied to dataSource when dataSourceRef.namespace is not specified. If the namespace is specified, then dataSourceRef will not be copied to dataSource.

Property	Type	Description
dataSourceRef	object	dataSourceRef specifies the object from which to populate the volume with data, if a non-empty volume is desired. This may be any object from a non-empty API group (non core object) or a PersistentVolumeClaim object. When this field is specified, volume binding will only succeed if the type of the specified object matches some installed volume populator or dynamic provisioner. This field will replace the functionality of the dataSource field and as such if both fields are non-empty, they must have the same value. For backwards compatibility, when namespace isn't specified in dataSourceRef, both fields (dataSource and dataSourceRef) will be set to the same value automatically if one of them is empty and the other is non-empty. When namespace is specified in dataSourceRef, dataSource isn't set to the same value and must be empty. There are three important differences between dataSource and dataSourceRef: * - While dataSource only allows two specific types of objects, dataSourceRef allows any non-core object, as well as PersistentVolumeClaim objects. * - While dataSource ignores disallowed values (dropping them), dataSourceRef preserves all values, and generates an error if a disallowed value is specified. * - While dataSource only allows local objects, dataSourceRef allows objects in any namespaces. (Beta) Using this field requires the AnyVolumeDataSource feature gate to be enabled. (Alpha) Using the namespace field of dataSourceRef requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

Property	Type	Description
resources	object	resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources
selector	object	selector is a label query over volumes to consider for binding.
storageClassName	string	storageClassName is the name of the StorageClass required by the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#class-1

Property	Type	Description
volumeAttributesClassName	string	volumeAttributesClassName may be used to set the VolumeAttributesClass used by this claim. If specified, the CSI driver will create or update the volume with the attributes defined in the corresponding VolumeAttributesClass. This has a different purpose than storageClassName, it can be changed after the claim is created. An empty string value means that no VolumeAttributesClass will be applied to the claim but it's not allowed to reset this field to empty string once it is set. If unspecified and the PersistentVolumeClaim is unbound, the default VolumeAttributesClass will be set by the persistentvolume controller if it exists. If the resource referred to by volumeAttributesClass does not exist, this PersistentVolumeClaim will be set to a Pending state, as reflected by the modifyVolumeStatus field, until such as a resource exists. More info: https://kubernetes.io/docs/concepts/storage/volume-attributes-classes/ (Beta) Using this field requires the VolumeAttributesClass feature gate to be enabled (off by default).
volumeMode	string	volumeMode defines what type of volume is required by the claim. Value of Filesystem is implied when not included in claim spec.
volumeName	string	volumeName is the binding reference to the PersistentVolume backing this claim.

2.1.355. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.dataSource

Description

dataSource field can be used to specify either: * An existing VolumeSnapshot object (snapshot.storage.k8s.io/VolumeSnapshot) * An existing PVC (PersistentVolumeClaim) If the provisioner or an external controller can support the specified data source, it will create a new volume based on the contents of the specified data source. When the AnyVolumeDataSource feature gate is enabled, dataSource contents will be copied to dataSourceRef, and dataSourceRef contents will be copied to dataSource when dataSourceRef.namespace is not specified. If the namespace is specified, then dataSourceRef will not be copied to dataSource.

Type

object

Required

- **kind**
- **name**

Property	Type	Description
apiGroup	string	APIGroup is the group for the resource being referenced. If APIGroup is not specified, the specified Kind must be in the core API group. For any other third-party types, APIGroup is required.
kind	string	Kind is the type of resource being referenced
name	string	Name is the name of resource being referenced

2.1.356. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.dataSourceRef

Description

dataSourceRef specifies the object from which to populate the volume with data, if a non-empty volume is desired. This may be any object from a non-empty API group (non core object) or a PersistentVolumeClaim object. When this field is specified, volume binding will only succeed if the type of the specified object matches some installed volume populator or dynamic provisioner. This field will replace the functionality of the dataSource field and as such if both fields are non-empty, they must have the same value. For backwards compatibility, when namespace isn't specified in dataSourceRef, both fields (dataSource and dataSourceRef) will be set to the same value automatically if one of them is empty and the other is non-empty. When namespace is specified in dataSourceRef, dataSource isn't set to the same value and must be empty. There are three important differences between dataSource and dataSourceRef: * While dataSource only allows two specific types of objects, dataSourceRef allows any non-core object, as well as PersistentVolumeClaim objects. * While dataSource ignores disallowed values (dropping them), dataSourceRef preserves all values, and generates an error if a disallowed value is specified. * While dataSource only allows local objects, dataSourceRef allows objects in any namespaces. (Beta) Using this field requires the AnyVolumeDataSource feature gate to be enabled. (Alpha) Using the namespace field of dataSourceRef requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

Type**object****Required**

- **kind**
- **name**

Property	Type	Description
apiGroup	string	APIGroup is the group for the resource being referenced. If APIGroup is not specified, the specified Kind must be in the core API group. For any other third-party types, APIGroup is required.
kind	string	Kind is the type of resource being referenced
name	string	Name is the name of resource being referenced
namespace	string	Namespace is the namespace of resource being referenced Note that when a namespace is specified, a gateway.networking.k8s.io/ReferenceGrant object is required in the referent namespace to allow that namespace's owner to accept the reference. See the ReferenceGrant documentation for details. (Alpha) This field requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

2.1.357. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.resources

Description

resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: <https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources>

Type**object**

Property	Type	Description
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

2.1.358. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.selector

Description

selector is a label query over volumes to consider for binding.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

2.1.359. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.selector.matchExpres:

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

2.1.360. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.selector.matchExpres**Description**

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

2.1.361. .spec.volumes[].fc**Description**

fc represents a Fibre Channel resource that is attached to a kubelet's host machine and then exposed to the pod.

Type

object

Property	Type	Description
fsType	string	fsType is the filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified.
lun	integer	lun is Optional: FC target lun number
readOnly	boolean	readOnly is Optional: Defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.
targetWWNs	array (string)	targetWWNs is Optional: FC target worldwide names (WWNs)
wwids	array (string)	wwids Optional: FC volume world wide identifiers (wwids) Either wwids or combination of targetWWNs and lun must be set, but not both simultaneously.

2.1.362. .spec.volumes[].flexVolume

Description

flexVolume represents a generic volume resource that is provisioned/attached using an exec based plugin. Deprecated: FlexVolume is deprecated. Consider using a CSIDriver instead.

Type

object

Required

- **driver**

Property	Type	Description
driver	string	driver is the name of the driver to use for this volume.

Property	Type	Description
fsType	string	fsType is the filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". The default filesystem depends on FlexVolume script.
options	object (string)	options is Optional: this field holds extra command options if any.
readOnly	boolean	readOnly is Optional: defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.
secretRef	object	secretRef is Optional: secretRef is reference to the secret object containing sensitive information to pass to the plugin scripts. This may be empty if no secret object is specified. If the secret object contains more than one secret, all secrets are passed to the plugin scripts.

2.1.363. .spec.volumes[].flexVolume.secretRef

Description

secretRef is Optional: secretRef is reference to the secret object containing sensitive information to pass to the plugin scripts. This may be empty if no secret object is specified. If the secret object contains more than one secret, all secrets are passed to the plugin scripts.

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

2.1.364. .spec.volumes[].flocker

Description

flocker represents a Flocker volume attached to a kubelet's host machine. This depends on the Flocker control service being running. Deprecated: Flocker is deprecated and the in-tree flocker type is no longer supported.

Type

object

Property	Type	Description
datasetName	string	datasetName is Name of the dataset stored as metadata → name on the dataset for Flocker should be considered as deprecated
datasetUUID	string	datasetUUID is the UUID of the dataset. This is unique identifier of a Flocker dataset

2.1.365. .spec.volumes[].gcePersistentDisk**Description**

gcePersistentDisk represents a GCE Disk resource that is attached to a kubelet's host machine and then exposed to the pod. Deprecated: GCEPersistentDisk is deprecated. All operations for the in-tree gcePersistentDisk type are redirected to the pd.csi.storage.gke.io CSI driver. More info: <https://kubernetes.io/docs/concepts/storage/volumes#gcepersistentdisk>

Type

object

Required

- **pdName**

Property	Type	Description
fsType	string	fsType is filesystem type of the volume that you want to mount. Tip: Ensure that the filesystem type is supported by the host operating system. Examples: "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified. More info: https://kubernetes.io/docs/concepts/storage/volumes#gcepersistentdisk

Property	Type	Description
partition	integer	partition is the partition in the volume that you want to mount. If omitted, the default is to mount by volume name. Examples: For volume /dev/sda1, you specify the partition as "1". Similarly, the volume partition for /dev/sda is "0" (or you can leave the property empty). More info: https://kubernetes.io/docs/concepts/storage/volumes#gcepersistentdisk
pdName	string	pdName is unique name of the PD resource in GCE. Used to identify the disk in GCE. More info: https://kubernetes.io/docs/concepts/storage/volumes#gcepersistentdisk
readOnly	boolean	readOnly here will force the ReadOnly setting in VolumeMounts. Defaults to false. More info: https://kubernetes.io/docs/concepts/storage/volumes#gcepersistentdisk

2.1.366. .spec.volumes[].gitRepo

Description

gitRepo represents a git repository at a particular revision. **Deprecated:** GitRepo is deprecated. To provision a container with a git repo, mount an EmptyDir into an InitContainer that clones the repo using git, then mount the EmptyDir into the Pod's container.

Type

object

Required

- **repository**

Property	Type	Description

Property	Type	Description
directory	string	directory is the target directory name. Must not contain or start with '..'. If '.' is supplied, the volume directory will be the git repository. Otherwise, if specified, the volume will contain the git repository in the subdirectory with the given name.
repository	string	repository is the URL
revision	string	revision is the commit hash for the specified revision.

2.1.367. .spec.volumes[].glusterfs

Description

glusterfs represents a Glusterfs mount on the host that shares a pod's lifetime. Deprecated: Glusterfs is deprecated and the in-tree glusterfs type is no longer supported. More info: <https://examples.k8s.io/volumes/glusterfs/README.md>

Type

object

Required

- **endpoints**
- **path**

Property	Type	Description
endpoints	string	endpoints is the endpoint name that details Glusterfs topology. More info: https://examples.k8s.io/volumes/glusterfs/README.md#create-a-pod
path	string	path is the Glusterfs volume path. More info: https://examples.k8s.io/volumes/glusterfs/README.md#create-a-pod

Property	Type	Description
readOnly	boolean	readOnly here will force the Glusterfs volume to be mounted with read-only permissions. Defaults to false. More info: https://examples.k8s.io/volumes/glusterfs/README.md#create-a-pod

2.1.368. .spec.volumes[].hostPath

Description

hostPath represents a pre-existing file or directory on the host machine that is directly exposed to the container. This is generally used for system agents or other privileged things that are allowed to see the host machine. Most containers will NOT need this. More info:

<https://kubernetes.io/docs/concepts/storage/volumes#hostpath>

Type

object

Required

- **path**

Property	Type	Description
path	string	path of the directory on the host. If the path is a symlink, it will follow the link to the real path. More info: https://kubernetes.io/docs/concepts/storage/volumes#hostpath
type	string	type for HostPath Volume Defaults to "" More info: https://kubernetes.io/docs/concepts/storage/volumes#hostpath

2.1.369. .spec.volumes[].image

Description

image represents an OCI object (a container image or artifact) pulled and mounted on the kubelet's host machine. The volume is resolved at pod startup depending on which PullPolicy value is provided:

- Always: the kubelet always attempts to pull the reference. Container creation will fail if the pull fails.
- Never: the kubelet never pulls the reference and only uses a local image or artifact. Container creation will fail if the reference isn't present.

- **IfNotPresent**: the kubelet pulls if the reference isn't already present on disk. Container creation will fail if the reference isn't present and the pull fails.

The volume gets re-resolved if the pod gets deleted and recreated, which means that new remote content will become available on pod recreation. A failure to resolve or pull the image during pod startup will block containers from starting and may add significant latency. Failures will be retried using normal volume backoff and will be reported on the pod reason and message. The types of objects that may be mounted by this volume are defined by the container runtime implementation on a host machine and at minimum must include all valid types supported by the container image field. The OCI object gets mounted in a single directory (`spec.containers[].volumeMounts.mountPath`) **by merging the manifest layers in the same way as for container images. The volume will be mounted read-only (ro) and non-executable files (noexec). Sub path mounts for containers are not supported (`spec.containers[].volumeMounts.subpath`) before 1.33.** The field `spec.securityContext.fsGroupChangePolicy` has no effect on this volume type.

Type

object

Property	Type	Description
pullPolicy	string	Policy for pulling OCI objects. Possible values are: Always : the kubelet always attempts to pull the reference. Container creation will fail if the pull fails. Never : the kubelet never pulls the reference and only uses a local image or artifact. Container creation will fail if the reference isn't present. IfNotPresent : the kubelet pulls if the reference isn't already present on disk. Container creation will fail if the reference isn't present and the pull fails. Defaults to Always if <code>:latest</code> tag is specified, or IfNotPresent otherwise.

Property	Type	Description
reference	string	Required: Image or artifact reference to be used. Behaves in the same way as pod.spec.containers[*].image. Pull secrets will be assembled in the same way as for the container image by looking up node credentials, SA image pull secrets, and pod spec image pull secrets. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.

2.1.370. .spec.volumes[].iscsi

Description

iscsi represents an iSCSI Disk resource that is attached to a kubelet's host machine and then exposed to the pod. More info: <https://examples.k8s.io/volumes/iscsi/README.md>

Type

object

Required

- **iqn**
- **lun**
- **targetPortal**

Property	Type	Description
chapAuthDiscovery	boolean	chapAuthDiscovery defines whether support iSCSI Discovery CHAP authentication
chapAuthSession	boolean	chapAuthSession defines whether support iSCSI Session CHAP authentication

Property	Type	Description
fsType	string	fsType is the filesystem type of the volume that you want to mount. Tip: Ensure that the filesystem type is supported by the host operating system. Examples: "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified. More info: https://kubernetes.io/docs/concepts/storage/volumes#iscsi
initiatorName	string	initiatorName is the custom iSCSI Initiator Name. If initiatorName is specified with iscsiInterface simultaneously, new iSCSI interface <target portal>:<volume name> will be created for the connection.
iqn	string	iqn is the target iSCSI Qualified Name.
iscsilInterface	string	iscsilInterface is the interface Name that uses an iSCSI transport. Defaults to 'default' (tcp).
lun	integer	lun represents iSCSI Target Lun number.
portals	array (string)	portals is the iSCSI Target Portal List. The portal is either an IP or ip_addr:port if the port is other than default (typically TCP ports 860 and 3260).
readOnly	boolean	readOnly here will force the ReadOnly setting in VolumeMounts. Defaults to false.
secretRef	object	secretRef is the CHAP Secret for iSCSI target and initiator authentication
targetPortal	string	targetPortal is iSCSI Target Portal. The Portal is either an IP or ip_addr:port if the port is other than default (typically TCP ports 860 and 3260).

2.1.371. .spec.volumes[].iscsi.secretRef

Description

secretRef is the CHAP Secret for iSCSI target and initiator authentication

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

2.1.372. .spec.volumes[].nfs

Description

nfs represents an NFS mount on the host that shares a pod's lifetime More info:

<https://kubernetes.io/docs/concepts/storage/volumes#nfs>

Type

object

Required

- **path**
- **server**

Property	Type	Description
path	string	path that is exported by the NFS server. More info: https://kubernetes.io/docs/concepts/storage/volumes#nfs
readOnly	boolean	readOnly here will force the NFS export to be mounted with read-only permissions. Defaults to false. More info: https://kubernetes.io/docs/concepts/storage/volumes#nfs

Property	Type	Description
server	string	server is the hostname or IP address of the NFS server. More info: https://kubernetes.io/docs/concepts/storage/volumes#nfs

2.1.373. .spec.volumes[].persistentVolumeClaim

Description

`persistentVolumeClaimVolumeSource` represents a reference to a `PersistentVolumeClaim` in the same namespace. More info: <https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims>

Type

object

Required

- **claimName**

Property	Type	Description
claimName	string	<code>claimName</code> is the name of a <code>PersistentVolumeClaim</code> in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
readOnly	boolean	<code>readOnly</code> Will force the <code>ReadOnly</code> setting in <code>VolumeMounts</code> . Default <code>false</code> .

2.1.374. .spec.volumes[].photonPersistentDisk

Description

`photonPersistentDisk` represents a `PhotonController` persistent disk attached and mounted on kubelets host machine. **Deprecated:** `PhotonPersistentDisk` is deprecated and the in-tree `photonPersistentDisk` type is no longer supported.

Type

object

Required

- **pdID**

Property	Type	Description
fsType	string	fsType is the filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified.
pdID	string	pdID is the ID that identifies Photon Controller persistent disk

2.1.375. .spec.volumes[].portworxVolume

Description

portworxVolume represents a portworx volume attached and mounted on kubelets host machine.
 Deprecated: PortworxVolume is deprecated. All operations for the in-tree portworxVolume type are redirected to the pxd.portworx.com CSI driver when the CSIMigrationPortworx feature-gate is on.

Type

object

Required

- **volumeID**

Property	Type	Description
fsType	string	fSType represents the filesystem type to mount Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs". Implicitly inferred to be "ext4" if unspecified.
readOnly	boolean	readOnly defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.
volumeID	string	volumeID uniquely identifies a Portworx volume

2.1.376. .spec.volumes[].projected

Description

projected items for all in one resources secrets, configmaps, and downward API

Type

object

Property	Type	Description
defaultMode	integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	array	sources is the list of volume projections. Each entry in this list handles one source.
sources[]	object	Projection that may be projected along with other supported volume types. Exactly one of these fields must be set.

2.1.377. .spec.volumes[].projected.sources

Description

sources is the list of volume projections. Each entry in this list handles one source.

Type

array

2.1.378. .spec.volumes[].projected.sources[]

Description

Projection that may be projected along with other supported volume types. Exactly one of these fields must be set.

Type

object

Property	Type	Description

Property	Type	Description
clusterTrustBundle	object	ClusterTrustBundle allows a pod to access the .spec.trustBundle field of ClusterTrustBundle objects in an auto-updating file. Alpha, gated by the ClusterTrustBundleProjection feature gate. ClusterTrustBundle objects can either be selected by name, or by the combination of signer name and a label selector. Kubelet performs aggressive normalization of the PEM contents written into the pod filesystem. Esoteric PEM features such as inter-block comments and block headers are stripped. Certificates are deduplicated. The ordering of certificates within the file is arbitrary, and Kubelet may change the order over time.
configMap	object	configMap information about the configMap data to project
downwardAPI	object	downwardAPI information about the downwardAPI data to project
secret	object	secret information about the secret data to project
serviceAccountToken	object	serviceAccountToken is information about the serviceAccountToken data to project

2.1.379. .spec.volumes[].projected.sources[].clusterTrustBundle

Description

ClusterTrustBundle allows a pod to access the **.spec.trustBundle** field of ClusterTrustBundle objects in an auto-updating file.

Alpha, gated by the ClusterTrustBundleProjection feature gate.

ClusterTrustBundle objects can either be selected by name, or by the combination of signer name and a label selector.

Kubelet performs aggressive normalization of the PEM contents written into the pod filesystem. Esoteric PEM features such as inter-block comments and block headers are stripped. Certificates are deduplicated. The ordering of certificates within the file is arbitrary, and Kubelet may change the order over time.

Type

object

Required

- **path**

Property	Type	Description
labelSelector	object	Select all ClusterTrustBundles that match this label selector. Only has effect if signerName is set. Mutually-exclusive with name. If unset, interpreted as "match nothing". If set but empty, interpreted as "match everything".
name	string	Select a single ClusterTrustBundle by object name. Mutually-exclusive with signerName and labelSelector.
optional	boolean	If true, don't block pod startup if the referenced ClusterTrustBundle(s) aren't available. If using name, then the named ClusterTrustBundle is allowed not to exist. If using signerName, then the combination of signerName and labelSelector is allowed to match zero ClusterTrustBundles.
path	string	Relative path from the volume root to write the bundle.
signerName	string	Select all ClusterTrustBundles that match this signer name. Mutually-exclusive with name. The contents of all selected ClusterTrustBundles will be unified and deduplicated.

2.1.380. .spec.volumes[].projected.sources[].clusterTrustBundle.labelSelector

Description

Select all ClusterTrustBundles that match this label selector. Only has effect if signerName is set. Mutually-exclusive with name. If unset, interpreted as "match nothing". If set but empty, interpreted as "match everything".

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

2.1.381. .spec.volumes[].projected.sources[].clusterTrustBundle.labelSelector.matchE

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

2.1.382. .spec.volumes[].projected.sources[].clusterTrustBundle.labelSelector.matchE

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

2.1.383. .spec.volumes[].projected.sources[].configMap

Description

configMap information about the configMap data to project

Type

object

Property	Type	Description
items	array	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.
items[]	object	Maps a string key to a path within a volume.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	optional specify whether the ConfigMap or its keys must be defined

2.1.384. .spec.volumes[].projected.sources[].configMap.items

Description

items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.

Type

array

2.1.385. .spec.volumes[].projected.sources[].configMap.items[]

Description

Maps a string key to a path within a volume.

Type

object

Required

- **key**
- **path**

Property	Type	Description
key	string	key is the key to project.

Property	Type	Description
mode	integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	string	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

2.1.386. .spec.volumes[].projected.sources[].downwardAPI

Description

downwardAPI information about the downwardAPI data to project

Type

object

Property	Type	Description
items	array	Items is a list of DownwardAPIVolume file
items[]	object	DownwardAPIVolumeFile represents information to create the file containing the pod field

2.1.387. .spec.volumes[].projected.sources[].downwardAPI.items

Description

Items is a list of DownwardAPIVolume file

Type

array

2.1.388. .spec.volumes[].projected.sources[].downwardAPI.items[]

Description

DownwardAPIVolumeFile represents information to create the file containing the pod field

Type

object

Required

- **path**

Property	Type	Description
fieldRef	object	Required: Selects a field of the pod: only annotations, labels, name, namespace and uid are supported.
mode	integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	string	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

2.1.389. .spec.volumes[].projected.sources[].downwardAPI.items[].fieldRef**Description**

Required: Selects a field of the pod: only annotations, labels, name, namespace and uid are supported.

Type

object**Required**

- **fieldPath**

Property	Type	Description
apiVersion	string	Version of the schema the FieldPath is written in terms of, defaults to "v1".
fieldPath	string	Path of the field to select in the specified API version.

2.1.390. .spec.volumes[].projected.sources[].downwardAPI.items[].resourceFieldRef**Description**

Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Type**object****Required**

- **resource**

Property	Type	Description
containerName	string	Container name: required for volumes, optional for env vars
divisor	integer-or-string	Specifies the output format of the exposed resources, defaults to "1"
resource	string	Required: resource to select

2.1.391. .spec.volumes[].projected.sources[].secret**Description**

secret information about the secret data to project

Type**object**

Property	Type	Description
items	array	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.
items[]	object	Maps a string key to a path within a volume.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	optional field specify whether the Secret or its key must be defined

2.1.392. .spec.volumes[].projected.sources[].secret.items

Description

items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.

Type

array

2.1.393. .spec.volumes[].projected.sources[].secret.items[]

Description

Maps a string key to a path within a volume.

Type

object**Required**

- **key**
- **path**

Property	Type	Description
key	string	key is the key to project.
mode	integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	string	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

2.1.394. .spec.volumes[].projected.sources[].serviceAccountToken**Description**

serviceAccountToken is information about the serviceAccountToken data to project

Type**object****Required**

- **path**

Property	Type	Description

Property	Type	Description
audience	string	audience is the intended audience of the token. A recipient of a token must identify itself with an identifier specified in the audience of the token, and otherwise should reject the token. The audience defaults to the identifier of the apiserver.
expirationSeconds	integer	expirationSeconds is the requested duration of validity of the service account token. As the token approaches expiration, the kubelet volume plugin will proactively rotate the service account token. The kubelet will start trying to rotate the token if the token is older than 80 percent of its time to live or if the token is older than 24 hours. Defaults to 1 hour and must be at least 10 minutes.
path	string	path is the path relative to the mount point of the file to project the token into.

2.1.395. .spec.volumes[].quobyte

Description

quobyte represents a Quobyte mount on the host that shares a pod's lifetime. Deprecated: Quobyte is deprecated and the in-tree quobyte type is no longer supported.

Type

object

Required

- **registry**
- **volume**

Property	Type	Description
group	string	group to map volume access to Default is no group

Property	Type	Description
readOnly	boolean	readOnly here will force the Quobyte volume to be mounted with read-only permissions. Defaults to false.
registry	string	registry represents a single or multiple Quobyte Registry services specified as a string as host:port pair (multiple entries are separated with commas) which acts as the central registry for volumes
tenant	string	tenant owning the given Quobyte volume in the Backend Used with dynamically provisioned Quobyte volumes, value is set by the plugin
user	string	user to map volume access to Defaults to serviceaccount user
volume	string	volume is a string that references an already created Quobyte volume by name.

2.1.396. .spec.volumes[].rbd

Description

rbd represents a Rados Block Device mount on the host that shares a pod's lifetime. Deprecated: RBD is deprecated and the in-tree rbd type is no longer supported. More info:

<https://examples.k8s.io/volumes/rbd/README.md>

Type

object

Required

- **image**
- **monitors**

Property	Type	Description

Property	Type	Description
fsType	string	fsType is the filesystem type of the volume that you want to mount. Tip: Ensure that the filesystem type is supported by the host operating system. Examples: "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified. More info: https://kubernetes.io/docs/concepts/storage/volumes#rbd
image	string	image is the rados image name. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it
keyring	string	keyring is the path to key ring for RBDUser. Default is /etc/ceph/keyring. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it
monitors	array (string)	monitors is a collection of Ceph monitors. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it
pool	string	pool is the rados pool name. Default is rbd. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it
readOnly	boolean	readOnly here will force the ReadOnly setting in VolumeMounts. Defaults to false. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it
secretRef	object	secretRef is name of the authentication secret for RBDUser. If provided overrides keyring. Default is nil. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it
user	string	user is the rados user name. Default is admin. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it

2.1.397. .spec.volumes[].rbd.secretRef

Description

secretRef is name of the authentication secret for RBDUser. If provided overrides keyring. Default is nil. More info: <https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it>

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

2.1.398. .spec.volumes[].scaleIO

Description

scaleIO represents a ScaleIO persistent volume attached and mounted on Kubernetes nodes.
Deprecated: ScaleIO is deprecated and the in-tree scaleIO type is no longer supported.

Type

object

Required

- **gateway**
- **secretRef**
- **system**

Property	Type	Description
fsType	string	fsType is the filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". Default is "xfs".
gateway	string	gateway is the host address of the ScaleIO API Gateway.

Property	Type	Description
protectionDomain	string	protectionDomain is the name of the ScaleIO Protection Domain for the configured storage.
readOnly	boolean	readOnly Defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.
secretRef	object	secretRef references to the secret for ScaleIO user and other sensitive information. If this is not provided, Login operation will fail.
sslEnabled	boolean	sslEnabled Flag enable/disable SSL communication with Gateway, default false
storageMode	string	storageMode indicates whether the storage for a volume should be ThickProvisioned or ThinProvisioned. Default is ThinProvisioned.
storagePool	string	storagePool is the ScaleIO Storage Pool associated with the protection domain.
system	string	system is the name of the storage system as configured in ScaleIO.
volumeName	string	volumeName is the name of a volume already created in the ScaleIO system that is associated with this volume source.

2.1.399. .spec.volumes[].scaleIO.secretRef

Description

secretRef references to the secret for ScaleIO user and other sensitive information. If this is not provided, Login operation will fail.

Type

object

Property	Type	Description

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

2.1.400. .spec.volumes[].secret

Description

secret represents a secret that should populate this volume. More info: <https://kubernetes.io/docs/concepts/storage/volumes#secret>

Type

object

Property	Type	Description
defaultMode	integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Property	Type	Description
items	array	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.
items[]	object	Maps a string key to a path within a volume.
optional	boolean	optional field specify whether the Secret or its keys must be defined
secretName	string	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

2.1.401. .spec.volumes[].secret.items

Description

items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.

Type

array

2.1.402. .spec.volumes[].secret.items[]

Description

Maps a string key to a path within a volume.

Type

object

Required

- **key**
- **path**

Property	Type	Description
key	string	key is the key to project.
mode	integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	string	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

2.1.403. .spec.volumes[].storageos

Description

storageOS represents a StorageOS volume attached and mounted on Kubernetes nodes.

Deprecated: StorageOS is deprecated and the in-tree storageos type is no longer supported.

Type

object

Property	Type	Description
fsType	string	fsType is the filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified.

Property	Type	Description
readOnly	boolean	readOnly defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.
secretRef	object	secretRef specifies the secret to use for obtaining the StorageOS API credentials. If not specified, default values will be attempted.
volumeName	string	volumeName is the human-readable name of the StorageOS volume. Volume names are only unique within a namespace.
volumeNamespace	string	volumeNamespace specifies the scope of the volume within StorageOS. If no namespace is specified then the Pod's namespace will be used. This allows the Kubernetes name scoping to be mirrored within StorageOS for tighter integration. Set VolumeName to any name to override the default behaviour. Set to "default" if you are not using namespaces within StorageOS. Namespaces that do not pre-exist within StorageOS will be created.

2.1.404. .spec.volumes[].storageos.secretRef

Description

secretRef specifies the secret to use for obtaining the StorageOS API credentials. If not specified, default values will be attempted.

Type

object

Property	Type	Description

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

2.1.405. .spec.volumes[].vsphereVolume

Description

vsphereVolume represents a vSphere volume attached and mounted on kubelets host machine.
 Deprecated: VsphereVolume is deprecated. All operations for the in-tree vsphereVolume type are redirected to the csi.vsphere.vmware.com CSI driver.

Type

object

Required

- **volumePath**

Property	Type	Description
fsType	string	fsType is filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified.
storagePolicyID	string	storagePolicyID is the storage Policy Based Management (SPBM) profile ID associated with the StoragePolicyName.
storagePolicyName	string	storagePolicyName is the storage Policy Based Management (SPBM) profile name.
volumePath	string	volumePath is the path that identifies vSphere volume vmdk

2.1.406. .spec.web

Description

Defines the web command line flags when starting Alertmanager.

Type

object

Property	Type	Description
getConcurrency	integer	Maximum number of GET requests processed concurrently. This corresponds to the Alertmanager's --web.get-concurrency flag.
httpConfig	object	Defines HTTP parameters for web server.
timeout	integer	Timeout for HTTP requests. This corresponds to the Alertmanager's --web.timeout flag.
tlsConfig	object	Defines the TLS parameters for HTTPS.

2.1.407. .spec.web.httpConfig**Description**

Defines HTTP parameters for web server.

Type

object

Property	Type	Description
headers	object	List of headers that can be added to HTTP responses.
http2	boolean	Enable HTTP/2 support. Note that HTTP/2 is only supported with TLS. When TLSConfig is not configured, HTTP/2 will be disabled. Whenever the value of the field changes, a rolling update will be triggered.

2.1.408. .spec.web.httpConfig.headers**Description**

List of headers that can be added to HTTP responses.

Type
object

Property	Type	Description
contentSecurityPolicy	string	Set the Content-Security-Policy header to HTTP responses. Unset if blank.
strictTransportSecurity	string	Set the Strict-Transport-Security header to HTTP responses. Unset if blank. Please make sure that you use this with care as this header might force browsers to load Prometheus and the other applications hosted on the same domain and subdomains over HTTPS. https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/Strict-Transport-Security
xContentTypeOptions	string	Set the X-Content-Type-Options header to HTTP responses. Unset if blank. Accepted value is nosniff. https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-Content-Type-Options
xFrameOptions	string	Set the X-Frame-Options header to HTTP responses. Unset if blank. Accepted values are deny and sameorigin. https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-Frame-Options
xXSSProtection	string	Set the X-XSS-Protection header to all responses. Unset if blank. https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-XSS-Protection

2.1.409. .spec.web.tlsConfig

Description

Defines the TLS parameters for HTTPS.

Type
object

Property	Type	Description
cert	object	Secret or ConfigMap containing the TLS certificate for the web server. Either keySecret or keyFile must be defined. It is mutually exclusive with certFile.
certFile	string	Path to the TLS certificate file in the container for the web server. Either keySecret or keyFile must be defined. It is mutually exclusive with cert.
cipherSuites	array (string)	List of supported cipher suites for TLS versions up to TLS 1.2. If not defined, the Go default cipher suites are used. Available cipher suites are documented in the Go documentation: https://golang.org/pkg/crypto/tls/#pkg-constants
clientAuthType	string	The server policy for client TLS authentication. For more detail on clientAuth options: https://golang.org/pkg/crypto/tls/#ClientAuthType
clientCAFile	string	Path to the CA certificate file for client certificate authentication to the server. It is mutually exclusive with client_ca.
client_ca	object	Secret or ConfigMap containing the CA certificate for client certificate authentication to the server. It is mutually exclusive with clientCAFile.

Property	Type	Description
curvePreferences	array (string)	Elliptic curves that will be used in an ECDHE handshake, in preference order. Available curves are documented in the Go documentation: https://golang.org/pkg/crypto/tls/#CurveID
keyFile	string	Path to the TLS private key file in the container for the web server. If defined, either cert or certFile must be defined. It is mutually exclusive with keySecret.
keySecret	object	Secret containing the TLS private key for the web server. Either cert or certFile must be defined. It is mutually exclusive with keyFile.
maxVersion	string	Maximum TLS version that is acceptable.
minVersion	string	Minimum TLS version that is acceptable.
preferServerCipherSuites	boolean	Controls whether the server selects the client's most preferred cipher suite, or the server's most preferred cipher suite. If true then the server's preference, as expressed in the order of elements in cipherSuites, is used.

2.1.410. .spec.web.tlsConfig.cert

Description

Secret or ConfigMap containing the TLS certificate for the web server.
 Either **keySecret** or **keyFile** must be defined.

It is mutually exclusive with **certFile**.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

2.1.411. .spec.web.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

2.1.412. .spec.web.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.413. .spec.web.tlsConfig.client_ca

Description

Secret or ConfigMap containing the CA certificate for client certificate authentication to the server. It is mutually exclusive with **clientCAFile**.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

2.1.414. .spec.web.tlsConfig.client_ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

2.1.415. .spec.web.tlsConfig.client_ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.416. .spec.web.tlsConfig.keySecret

Description

Secret containing the TLS private key for the web server.
Either **cert** or **certFile** must be defined.

It is mutually exclusive with **keyFile**.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

2.1.417. .status

Description

Most recent observed status of the Alertmanager cluster. Read-only. More info: <https://github.com/kubernetes/community/blob/master/contributors/devel/sig-architecture/api-conventions.md#spec-and-status>

Type

object

Required

- **availableReplicas**
- **paused**
- **replicas**
- **unavailableReplicas**
- **updatedReplicas**

Property	Type	Description
availableReplicas	integer	Total number of available pods (ready for at least minReadySeconds) targeted by this Alertmanager cluster.
conditions	array	The current state of the Alertmanager object.
conditions[]	object	Condition represents the state of the resources associated with the Prometheus, Alertmanager or ThanosRuler resource.
paused	boolean	Represents whether any actions on the underlying managed objects are being performed. Only delete actions will be performed.
replicas	integer	Total number of non-terminated pods targeted by this Alertmanager object (their labels match the selector).
selector	string	The selector used to match the pods targeted by this Alertmanager object.
unavailableReplicas	integer	Total number of unavailable pods targeted by this Alertmanager object.
updatedReplicas	integer	Total number of non-terminated pods targeted by this Alertmanager object that have the desired version spec.

2.1.418. .status.conditions

Description

The current state of the Alertmanager object.

Type

array

2.1.419. .status.conditions[]

Description

Condition represents the state of the resources associated with the Prometheus, Alertmanager or ThanosRuler resource.

Type

object

Required

- **lastTransitionTime**
- **status**
- **type**

Property	Type	Description
lastTransitionTime	string	lastTransitionTime is the time of the last update to the current status property.
message	string	Human-readable message indicating details for the condition's last transition.
observedGeneration	integer	ObservedGeneration represents the <code>.metadata.generation</code> that the condition was set based upon. For instance, if <code>.metadata.generation</code> is currently 12, but the <code>.status.conditions[].observedGeneration</code> is 9, the condition is out of date with respect to the current state of the instance.
reason	string	Reason for the condition's last transition.
status	string	Status of the condition.
type	string	Type of the condition being reported.

2.2. API ENDPOINTS

The following API endpoints are available:

- **/apis/monitoring.coreos.com/v1/alertmanagers**
 - **GET**: list objects of kind Alertmanager
- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/alertmanagers**
 - **DELETE**: delete collection of Alertmanager

- **GET**: list objects of kind Alertmanager
- **POST**: create an Alertmanager
- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/alertmanagers/{name}**
 - **DELETE**: delete an Alertmanager
 - **GET**: read the specified Alertmanager
 - **PATCH**: partially update the specified Alertmanager
 - **PUT**: replace the specified Alertmanager
- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/alertmanagers/{name}/scale**
 - **GET**: read scale of the specified Alertmanager
 - **PATCH**: partially update scale of the specified Alertmanager
 - **PUT**: replace scale of the specified Alertmanager
- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/alertmanagers/{name}/status**
 - **GET**: read status of the specified Alertmanager
 - **PATCH**: partially update status of the specified Alertmanager
 - **PUT**: replace status of the specified Alertmanager

2.2.1. /apis/monitoring.coreos.com/v1/alertmanagers

HTTP method

GET

Description

list objects of kind Alertmanager

Table 2.1. HTTP responses

HTTP code	Response body
200 - OK	AlertmanagerList schema
401 - Unauthorized	Empty

2.2.2. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/alertmanagers

HTTP method

DELETE

Description

delete collection of Alertmanager

Table 2.2. HTTP responses

HTTP code	Reponse body
200 - OK	Status schema
401 - Unauthorized	Empty

HTTP method

GET

Description

list objects of kind Alertmanager

Table 2.3. HTTP responses

HTTP code	Reponse body
200 - OK	AlertmanagerList schema
401 - Unauthorized	Empty

HTTP method

POST

Description

create an Alertmanager

Table 2.4. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Parameter	Type	Description
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 2.5. Body parameters

Parameter	Type	Description
body	Alertmanager schema	

Table 2.6. HTTP responses

HTTP code	Reponse body
200 - OK	Alertmanager schema
201 - Created	Alertmanager schema
202 - Accepted	Alertmanager schema
401 - Unauthorized	Empty

2.2.3. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/alertmanagers/{na

Table 2.7. Global path parameters

Parameter	Type	Description
name	string	name of the Alertmanager

HTTP method**DELETE****Description**

delete an Alertmanager

Table 2.8. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Table 2.9. HTTP responses

HTTP code	Response body
200 - OK	Status schema
202 - Accepted	Status schema
401 - Unauthorized	Empty

HTTP method**GET****Description**

read the specified Alertmanager

Table 2.10. HTTP responses

HTTP code	Response body
200 - OK	Alertmanager schema
401 - Unauthorized	Empty

HTTP method**PATCH****Description**

partially update the specified Alertmanager

Table 2.11. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 2.12. HTTP responses

HTTP code	Response body
200 - OK	Alertmanager schema
401 - Unauthorized	Empty

HTTP method**PUT****Description**

replace the specified Alertmanager

Table 2.13. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Parameter	Type	Description
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 2.14. Body parameters

Parameter	Type	Description
body	Alertmanager schema	

Table 2.15. HTTP responses

HTTP code	Response body
200 - OK	Alertmanager schema
201 - Created	Alertmanager schema
401 - Unauthorized	Empty

2.2.4. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/alertmanagers/{na

Table 2.16. Global path parameters

Parameter	Type	Description
name	string	name of the Alertmanager

HTTP method

GET

Description

read scale of the specified Alertmanager

Table 2.17. HTTP responses

HTTP code	Response body
200 - OK	Scale schema
401 - Unauthorized	Empty

HTTP method**PATCH****Description**

partially update scale of the specified Alertmanager

Table 2.18. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 2.19. HTTP responses

HTTP code	Response body
200 - OK	Scale schema
401 - Unauthorized	Empty

HTTP method**PUT****Description**

replace scale of the specified Alertmanager

Table 2.20. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 2.21. Body parameters

Parameter	Type	Description
body	Scale schema	

Table 2.22. HTTP responses

HTTP code	Reponse body
200 - OK	Scale schema
201 - Created	Scale schema
401 - Unauthorized	Empty

2.2.5. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/alertmanagers/{na

Table 2.23. Global path parameters

Parameter	Type	Description
name	string	name of the Alertmanager

HTTP method

GET

Description

read status of the specified Alertmanager

Table 2.24. HTTP responses

HTTP code	Reponse body
200 - OK	Alertmanager schema
401 - Unauthorized	Empty

HTTP method

PATCH

Description

partially update status of the specified Alertmanager

Table 2.25. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Parameter	Type	Description
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 2.26. HTTP responses

HTTP code	Response body
200 - OK	Alertmanager schema
401 - Unauthorized	Empty

HTTP method**PUT****Description**

replace status of the specified Alertmanager

Table 2.27. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Parameter	Type	Description
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 2.28. Body parameters

Parameter	Type	Description
body	Alertmanager schema	

Table 2.29. HTTP responses

HTTP code	Reponse body
200 - OK	Alertmanager schema
201 - Created	Alertmanager schema
401 - Unauthorized	Empty

CHAPTER 3. ALERTMANAGERCONFIG

[MONITORING.COREOS.COM/V1BETA1]

Description

The **AlertmanagerConfig** custom resource definition (CRD) defines how **Alertmanager** objects process Prometheus alerts. It allows to specify alert grouping and routing, notification receivers and inhibition rules.

Alertmanager objects select **AlertmanagerConfig** objects using label and namespace selectors.

Type

object

Required

- **spec**

3.1. SPECIFICATION

Property	Type	Description
apiVersion	string	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	string	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	ObjectMeta	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Property	Type	Description
spec	object	AlertmanagerConfigSpec is a specification of the desired behavior of the Alertmanager configuration. By definition, the Alertmanager configuration only applies to alerts for which the namespace label is equal to the namespace of the AlertmanagerConfig resource.

3.1.1. .spec

Description

AlertmanagerConfigSpec is a specification of the desired behavior of the Alertmanager configuration. By definition, the Alertmanager configuration only applies to alerts for which the **namespace** label is equal to the namespace of the AlertmanagerConfig resource.

Type

object

Property	Type	Description
inhibitRules	array	List of inhibition rules. The rules will only apply to alerts matching the resource's namespace.
inhibitRules[]	object	InhibitRule defines an inhibition rule that allows to mute alerts when other alerts are already firing. See https://prometheus.io/docs/alerting/latest/configuration/#inhibit_rule
receivers	array	List of receivers.
receivers[]	object	Receiver defines one or more notification integrations.
route	object	The Alertmanager route definition for alerts matching the resource's namespace. If present, it will be added to the generated Alertmanager configuration as a first-level route.

Property	Type	Description
timeIntervals	array	List of TimeInterval specifying when the routes should be muted or active.
timeIntervals[]	object	TimeInterval specifies the periods in time when notifications will be muted or active.

3.1.2. .spec.inhibitRules

Description

List of inhibition rules. The rules will only apply to alerts matching the resource's namespace.

Type

array

3.1.3. .spec.inhibitRules[]

Description

InhibitRule defines an inhibition rule that allows to mute alerts when other alerts are already firing. See https://prometheus.io/docs/alerting/latest/configuration/#inhibit_rule

Type

object

Property	Type	Description
equal	array (string)	Labels that must have an equal value in the source and target alert for the inhibition to take effect.
sourceMatch	array	Matchers for which one or more alerts have to exist for the inhibition to take effect. The operator enforces that the alert matches the resource's namespace.
sourceMatch[]	object	Matcher defines how to match on alert's labels.
targetMatch	array	Matchers that have to be fulfilled in the alerts to be muted. The operator enforces that the alert matches the resource's namespace.

Property	Type	Description
targetMatch[]	object	Matcher defines how to match on alert's labels.

3.1.4. .spec.inhibitRules[].sourceMatch

Description

Matchers for which one or more alerts have to exist for the inhibition to take effect. The operator enforces that the alert matches the resource's namespace.

Type

array

3.1.5. .spec.inhibitRules[].sourceMatch[]

Description

Matcher defines how to match on alert's labels.

Type

object

Required

- **name**

Property	Type	Description
matchType	string	Match operator, one of = (equal to), != (not equal to), =~ (regex match) or !~ (not regex match). Negative operators (!= and !~) require Alertmanager >= v0.22.0.
name	string	Label to match.
value	string	Label value to match.

3.1.6. .spec.inhibitRules[].targetMatch

Description

Matchers that have to be fulfilled in the alerts to be muted. The operator enforces that the alert matches the resource's namespace.

Type

array

3.1.7. .spec.inhibitRules[].targetMatch[]

Description

Matcher defines how to match on alert's labels.

Type

object

Required

- **name**

Property	Type	Description
matchType	string	Match operator, one of = (equal to), != (not equal to), =~ (regex match) or !~ (not regex match). Negative operators (!= and !~) require Alertmanager >= v0.22.0.
name	string	Label to match.
value	string	Label value to match.

3.1.8. .spec.receivers

Description

List of receivers.

Type

array

3.1.9. .spec.receivers[]

Description

Receiver defines one or more notification integrations.

Type

object

Required

- **name**

Property	Type	Description
discordConfigs	array	List of Slack configurations.

Property	Type	Description
discordConfigs[]	object	DiscordConfig configures notifications via Discord. See https://prometheus.io/docs/alerting/latest/configuration/#discord_config
emailConfigs	array	List of Email configurations.
emailConfigs[]	object	EmailConfig configures notifications via Email.
msteamsConfigs	array	List of MSTEams configurations. It requires Alertmanager >= 0.26.0.
msteamsConfigs[]	object	MSTEamsConfig configures notifications via Microsoft Teams. It requires Alertmanager >= 0.26.0.
msteamsv2Configs	array	List of MSTEamsV2 configurations. It requires Alertmanager >= 0.28.0.
msteamsv2Configs[]	object	MSTEamsV2Config configures notifications via Microsoft Teams using the new message format with adaptive cards as required by flows See https://prometheus.io/docs/alerting/latest/configuration/#msteamsv2_config It requires Alertmanager >= 0.28.0.
name	string	Name of the receiver. Must be unique across all items from the list.
opsgenieConfigs	array	List of OpsGenie configurations.
opsgenieConfigs[]	object	OpsGenieConfig configures notifications via OpsGenie. See https://prometheus.io/docs/alerting/latest/configuration/#opsgenie_config
pagerdutyConfigs	array	List of PagerDuty configurations.

Property	Type	Description
pagerdutyConfigs[]	object	PagerDutyConfig configures notifications via PagerDuty. See https://prometheus.io/docs/alerting/latest/configuration/#pagerduty_config
pushoverConfigs	array	List of Pushover configurations.
pushoverConfigs[]	object	PushoverConfig configures notifications via Pushover. See https://prometheus.io/docs/alerting/latest/configuration/#pushover_config
rocketchatConfigs	array	List of RocketChat configurations. It requires Alertmanager >= 0.28.0.
rocketchatConfigs[]	object	RocketChatConfig configures notifications via RocketChat. It requires Alertmanager >= 0.28.0.
slackConfigs	array	List of Slack configurations.
slackConfigs[]	object	SlackConfig configures notifications via Slack. See https://prometheus.io/docs/alerting/latest/configuration/#slack_config
snsConfigs	array	List of SNS configurations
snsConfigs[]	object	SNSConfig configures notifications via AWS SNS. See https://prometheus.io/docs/alerting/latest/configuration/#sns_configs
telegramConfigs	array	List of Telegram configurations.
telegramConfigs[]	object	TelegramConfig configures notifications via Telegram. See https://prometheus.io/docs/alerting/latest/configuration/#telegram_config
victoropsConfigs	array	List of VictorOps configurations.

Property	Type	Description
victoropsConfigs[]	object	VictorOpsConfig configures notifications via VictorOps. See https://prometheus.io/docs/alerting/latest/configuration/#victorops_config
webexConfigs	array	List of Webex configurations.
webexConfigs[]	object	WebexConfig configures notification via Cisco Webex See https://prometheus.io/docs/alerting/latest/configuration/#webex_config
webhookConfigs	array	List of webhook configurations.
webhookConfigs[]	object	WebhookConfig configures notifications via a generic receiver supporting the webhook payload. See https://prometheus.io/docs/alerting/latest/configuration/#webhook_config
wechatConfigs	array	List of WeChat configurations.
wechatConfigs[]	object	WeChatConfig configures notifications via WeChat. See https://prometheus.io/docs/alerting/latest/configuration/#wechat_config

3.1.10. .spec.receivers[].discordConfigs

Description

List of Slack configurations.

Type

array

3.1.11. .spec.receivers[].discordConfigs[]

Description

DiscordConfig configures notifications via Discord. See https://prometheus.io/docs/alerting/latest/configuration/#discord_config

Type

object

Required

- **apiURL**

Property	Type	Description
apiURL	object	The secret's key that contains the Discord webhook URL. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
avatarURL	string	The avatar url of the message sender.
content	string	The template of the content's body.
httpConfig	object	HTTP client configuration.
message	string	The template of the message's body.
sendResolved	boolean	Whether or not to notify about resolved alerts.
title	string	The template of the message's title.
username	string	The username of the message sender.

3.1.12. .spec.receivers[].discordConfigs[].apiURL

Description

The secret's key that contains the Discord webhook URL. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.13. .spec.receivers[].discordConfigs[].httpConfig

Description

HTTP client configuration.

Type

object

Property	Type	Description
authorization	object	Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.
basicAuth	object	BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.
bearerTokenSecret	object	The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
followRedirects	boolean	FollowRedirects specifies whether the client should follow HTTP 3xx redirects.

Property	Type	Description
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
oauth2	object	OAuth2 client credentials used to fetch a token for the targets.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyURL	string	Optional proxy URL. If defined, this field takes precedence over proxyUrl.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
tlsConfig	object	TLS configuration for the client.

3.1.14. .spec.receivers[].discordConfigs[].httpConfig.authorization

Description

Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

3.1.15. .spec.receivers[].discordConfigs[].httpConfig.authorization.credentials

Description

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.16. .spec.receivers[].discordConfigs[].httpConfig.basicAuth

Description

BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

3.1.17. .spec.receivers[].discordConfigs[].httpConfig.basicAuth.password

Description

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.18. .spec.receivers[].discordConfigs[].httpConfig.basicAuth.username

Description

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.19. .spec.receivers[].discordConfigs[].httpConfig.bearerTokenSecret**Description**

The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	The name of the secret in the object's namespace to select from.

3.1.20. .spec.receivers[].discordConfigs[].httpConfig.oauth2

Description

OAuth2 client credentials used to fetch a token for the targets.

Type

object

Required

- **clientId**
- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Property	Type	Description
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{[]}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

3.1.21. .spec.receivers[].discordConfigs[].httpConfig.oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.22. .spec.receivers[].discordConfigs[].httpConfig.oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.23. .spec.receivers[].discordConfigs[].httpConfig.oauth2.clientId.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.24. .spec.receivers[].discordConfigs[].httpConfig.oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.25. .spec.receivers[].discordConfigs[].httpConfig.oauth2.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.26. .spec.receivers[].discordConfigs[].httpConfig.oauth2.proxyConnectHeader{}

Description

Type

array

3.1.27. .spec.receivers[].discordConfigs[].httpConfig.oauth2.proxyConnectHeader{}

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.28. .spec.receivers[].discordConfigs[].httpConfig.oauth2.tlsConfig

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.29. .spec.receivers[].discordConfigs[].httpConfig.oauth2.tlsConfig.ca**Description**

Certificate authority used when verifying server certificates.

Type**object**

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.30. .spec.receivers[].discordConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap**Description**

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.31. .spec.receivers[].discordConfigs[].httpConfig.oauth2.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.32. .spec.receivers[].discordConfigs[].httpConfig.oauth2.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.33. .spec.receivers[].discordConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.34. .spec.receivers[].discordConfigs[].httpConfig.oauth2.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.35. .spec.receivers[].discordConfigs[].httpConfig.oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.36. .spec.receivers[].discordConfigs[].httpConfig.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.37. .spec.receivers[].discordConfigs[].httpConfig.proxyConnectHeader{}

Description

Type

array

3.1.38. .spec.receivers[].discordConfigs[].httpConfig.proxyConnectHeader{}{}

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.39. .spec.receivers[].discordConfigs[].httpConfig.tlsConfig

Description

TLS configuration for the client.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.

Property	Type	Description
serverName	string	Used to verify the hostname for the targets.

3.1.40. .spec.receivers[].discordConfigs[].httpConfig.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.41. .spec.receivers[].discordConfigs[].httpConfig.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.42. .spec.receivers[].discordConfigs[].httpConfig.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.43. .spec.receivers[].discordConfigs[].httpConfig.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.44. .spec.receivers[].discordConfigs[].httpConfig.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.45. .spec.receivers[].discordConfigs[].httpConfig.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.46. .spec.receivers[].discordConfigs[].httpConfig.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.47. .spec.receivers[].emailConfigs

Description

List of Email configurations.

Type

array

3.1.48. .spec.receivers[].emailConfigs[]

Description

EmailConfig configures notifications via Email.

Type

object

Property	Type	Description
authIdentity	string	The identity to use for authentication.
authPassword	object	The secret's key that contains the password to use for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
authSecret	object	The secret's key that contains the CRAM-MD5 secret. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
authUsername	string	The username to use for authentication.
from	string	The sender address.
headers	array	Further headers email header key/value pairs. Overrides any headers previously set by the notification implementation.
headers[]	object	KeyValue defines a (key, value) tuple.
hello	string	The hostname to identify to the SMTP server.
html	string	The HTML body of the email notification.
requireTLS	boolean	The SMTP TLS requirement. Note that Go does not support unencrypted connections to remote SMTP endpoints.
sendResolved	boolean	Whether or not to notify about resolved alerts.
smarthost	string	The SMTP host and port through which emails are sent. E.g. example.com:25

Property	Type	Description
text	string	The text body of the email notification.
tlsConfig	object	TLS configuration
to	string	The email address to send notifications to.

3.1.49. .spec.receivers[].emailConfigs[].authPassword

Description

The secret's key that contains the password to use for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.50. .spec.receivers[].emailConfigs[].authSecret

Description

The secret's key that contains the CRAM-MD5 secret. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**

- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.51. .spec.receivers[].emailConfigs[].headers

Description

Further headers email header key/value pairs. Overrides any headers previously set by the notification implementation.

Type

array

3.1.52. .spec.receivers[].emailConfigs[].headers[]

Description

KeyValue defines a (key, value) tuple.

Type

object

Required

- **key**
- **value**

Property	Type	Description
key	string	Key of the tuple.
value	string	Value of the tuple.

3.1.53. .spec.receivers[].emailConfigs[].tlsConfig

Description

TLS configuration

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.54. .spec.receivers[].emailConfigs[].tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.55. .spec.receivers[].emailConfigs[].tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.56. .spec.receivers[].emailConfigs[].tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.57. .spec.receivers[].emailConfigs[].tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.58. .spec.receivers[].emailConfigs[].tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.59. .spec.receivers[].emailConfigs[].tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.60. .spec.receivers[].emailConfigs[].tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.61. .spec.receivers[].msteamsConfigs

Description

List of MSTEams configurations. It requires Alertmanager >= 0.26.0.

Type

array

3.1.62. .spec.receivers[].msteamsConfigs[]

Description

MSTEamsConfig configures notifications via Microsoft Teams. It requires Alertmanager >= 0.26.0.

Type

object

Required

- **webhookUrl**

Property	Type	Description
httpConfig	object	HTTP client configuration.
sendResolved	boolean	Whether to notify about resolved alerts.
summary	string	Message summary template. It requires Alertmanager >= 0.27.0.
text	string	Message body template.

Property	Type	Description
title	string	Message title template.
webhookUrl	object	MSTeams webhook URL.

3.1.63. .spec.receivers[].msteamsConfigs[].httpConfig

Description

HTTP client configuration.

Type

object

Property	Type	Description
authorization	object	Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.
basicAuth	object	BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.
bearerTokenSecret	object	The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
followRedirects	boolean	FollowRedirects specifies whether the client should follow HTTP 3xx redirects.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Property	Type	Description
oauth2	object	OAuth2 client credentials used to fetch a token for the targets.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyURL	string	Optional proxy URL. If defined, this field takes precedence over proxyUrl.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
tlsConfig	object	TLS configuration for the client.

3.1.64. .spec.receivers[].msteamsConfigs[].httpConfig.authorization

Description

Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

3.1.65. .spec.receivers[].msteamsConfigs[].httpConfig.authorization.credentials**Description**

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.66. .spec.receivers[].msteamsConfigs[].httpConfig.basicAuth

Description

BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

3.1.67. .spec.receivers[].msteamsConfigs[].httpConfig.basicAuth.password

Description

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.68. .spec.receivers[].msteamsConfigs[].httpConfig.basicAuth.username

Description

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.69. .spec.receivers[].msteamsConfigs[].httpConfig.bearerTokenSecret

Description

The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.70. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2

Description

OAuth2 client credentials used to fetch a token for the targets.

Type

object

Required

- **clientId**
- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	

Property	Type	Description
proxyConnectHeader{}}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

3.1.71. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.72. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.73. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.clientId.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.74. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.75. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object**3.1.76. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.proxyConnectHeader{}**

Description

Type

array**3.1.77. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.proxyConnectHeader{}**
[]

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.78. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.tlsConfig

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.79. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.80. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object**Required**

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.81. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.tlsConfig.ca.secret**Description**

Secret containing data to use for the targets.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.82. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.83. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.tlsConfig.cert.configMa

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.84. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.85. .spec.receivers[].msteamsConfigs[].httpConfig.oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.86. .spec.receivers[].msteamsConfigs[].httpConfig.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.87. .spec.receivers[].msteamsConfigs[].httpConfig.proxyConnectHeader{}

Description

Type

array

3.1.88. .spec.receivers[].msteamsConfigs[].httpConfig.proxyConnectHeader{}[]

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.89. .spec.receivers[].msteamsConfigs[].httpConfig.tlsConfig

Description

TLS configuration for the client.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.

Property	Type	Description
serverName	string	Used to verify the hostname for the targets.

3.1.90. .spec.receivers[].msteamsConfigs[].httpConfig.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.91. .spec.receivers[].msteamsConfigs[].httpConfig.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.92. .spec.receivers[].msteamsConfigs[].httpConfig.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.93. .spec.receivers[].msteamsConfigs[].httpConfig.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.94. .spec.receivers[].msteamsConfigs[].httpConfig.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.95. .spec.receivers[].msteamsConfigs[].httpConfig.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.96. .spec.receivers[].msteamsConfigs[].httpConfig.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.97. .spec.receivers[].msteamsConfigs[].webhookUrl

Description

MSTeams webhook URL.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.98. .spec.receivers[].msteamsv2Configs

Description

List of MSTEamsV2 configurations. It requires Alertmanager >= 0.28.0.

Type

array

3.1.99. .spec.receivers[].msteamsv2Configs[]

Description

MSTEamsV2Config configures notifications via Microsoft Teams using the new message format with adaptive cards as required by flows See https://prometheus.io/docs/alerting/latest/configuration/#msteamsv2_config It requires Alertmanager >= 0.28.0.

Type

object

Property	Type	Description
httpConfig	object	HTTP client configuration.
sendResolved	boolean	Whether to notify about resolved alerts.
text	string	Message body template.
title	string	Message title template.

Property	Type	Description
webhookURL	object	MSTeams incoming webhook URL.

3.1.100. .spec.receivers[].msteamsv2Configs[].httpConfig

Description

HTTP client configuration.

Type

object

Property	Type	Description
authorization	object	Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.
basicAuth	object	BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.
bearerTokenSecret	object	The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
followRedirects	boolean	FollowRedirects specifies whether the client should follow HTTP 3xx redirects.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Property	Type	Description
oauth2	object	OAuth2 client credentials used to fetch a token for the targets.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyURL	string	Optional proxy URL. If defined, this field takes precedence over proxyUrl .
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
tlsConfig	object	TLS configuration for the client.

3.1.101. .spec.receivers[].msteamsv2Configs[].httpConfig.authorization

Description

Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

3.1.102. `.spec.receivers[].msteamsv2Configs[].httpConfig.authorization.credentials`

Description

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.103. `.spec.receivers[].msteamsv2Configs[].httpConfig.basicAuth`

Description

BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

3.1.104. .spec.receivers[].msteamsv2Configs[].httpConfig.basicAuth.password

Description

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.105. .spec.receivers[].msteamsv2Configs[].httpConfig.basicAuth.username

Description

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.106. .spec.receivers[].msteamsv2Configs[].httpConfig.bearerTokenSecret

Description

The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.107. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2

Description

OAuth2 client credentials used to fetch a token for the targets.

Type

object

Required

- **clientId**
- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.

Property	Type	Description
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

3.1.108. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.109. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.110. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.clientId.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.111. `.spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.clientSecret`

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.112. `.spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.proxyConnectHeader`

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.113. `.spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.proxyConnectHeader`

Description

Type

array

3.1.114. `.spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.proxyConnectHeader`

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.115. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.tlsConfig

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.

Property	Type	Description
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.116. `.spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.tlsConfig.ca`

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.117. `.spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.tlsConfig.ca.configMap`

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.118. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.119. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.120. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.tlsConfig.cert.config**Description**

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.121. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.tlsConfig.cert.secret**Description**

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.122. .spec.receivers[].msteamsv2Configs[].httpConfig.oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.123. .spec.receivers[].msteamsv2Configs[].httpConfig.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.124. .spec.receivers[].msteamsv2Configs[].httpConfig.proxyConnectHeader{}**Description****Type**

array

3.1.125. .spec.receivers[].msteamsv2Configs[].httpConfig.proxyConnectHeader{}[]**Description**

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.126. .spec.receivers[].msteamsv2Configs[].httpConfig.tlsConfig**Description**

TLS configuration for the client.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.127. .spec.receivers[].msteamsv2Configs[].httpConfig.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.128. .spec.receivers[].msteamsv2Configs[].httpConfig.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object**Required**

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.129. .spec.receivers[].msteamsv2Configs[].httpConfig.tlsConfig.ca.secret**Description**

Secret containing data to use for the targets.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.130. .spec.receivers[].msteamsv2Configs[].httpConfig.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.131. .spec.receivers[].msteamsv2Configs[].httpConfig.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.132. .spec.receivers[].msteamsv2Configs[].httpConfig.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.133. .spec.receivers[].msteamsv2Configs[].httpConfig.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.134. .spec.receivers[].msteamsv2Configs[].webhookURL

Description

MSTeams incoming webhook URL.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.135. .spec.receivers[].opsgenieConfigs

Description

List of OpsGenie configurations.

Type

array

3.1.136. .spec.receivers[].opsgenieConfigs[]**Description**

OpsGenieConfig configures notifications via OpsGenie. See https://prometheus.io/docs/alerting/latest/configuration/#opsgenie_config

Type

object

Property	Type	Description
actions	string	Comma separated list of actions that will be available for the alert.
apiKey	object	The secret's key that contains the OpsGenie API key. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
apiURL	string	The URL to send OpsGenie API requests to.
description	string	Description of the incident.
details	array	A set of arbitrary key/value pairs that provide further detail about the incident.
details[]	object	KeyValue defines a (key, value) tuple.
entity	string	Optional field that can be used to specify which domain alert is related to.
httpConfig	object	HTTP client configuration.
message	string	Alert text limited to 130 characters.
note	string	Additional alert note.

Property	Type	Description
priority	string	Priority level of alert. Possible values are P1, P2, P3, P4, and P5.
responders	array	List of responders responsible for notifications.
responders[]	object	OpsGenieConfigResponder defines a responder to an incident. One of id , name or username has to be defined.
sendResolved	boolean	Whether or not to notify about resolved alerts.
source	string	Backlink to the sender of the notification.
tags	string	Comma separated list of tags attached to the notifications.

3.1.137. .spec.receivers[].opsgenieConfigs[].apiKey

Description

The secret's key that contains the OpsGenie API key. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.138. .spec.receivers[].opsgenieConfigs[].details

Description

A set of arbitrary key/value pairs that provide further detail about the incident.

Type

array

3.1.139. .spec.receivers[].opsgenieConfigs[].details[]

Description

KeyValue defines a (key, value) tuple.

Type

object

Required

- **key**
- **value**

Property	Type	Description
key	string	Key of the tuple.
value	string	Value of the tuple.

3.1.140. .spec.receivers[].opsgenieConfigs[].httpConfig

Description

HTTP client configuration.

Type

object

Property	Type	Description
authorization	object	Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.
basicAuth	object	BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.

Property	Type	Description
bearerTokenSecret	object	The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
followRedirects	boolean	FollowRedirects specifies whether the client should follow HTTP 3xx redirects.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
oauth2	object	OAuth2 client credentials used to fetch a token for the targets.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.

Property	Type	Description
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyURL	string	Optional proxy URL. If defined, this field takes precedence over proxyUrl .
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
tlsConfig	object	TLS configuration for the client.

3.1.141. .spec.receivers[].opsgenieConfigs[].httpConfig.authorization

Description

Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

3.1.142. .spec.receivers[].opsgenieConfigs[].httpConfig.authorization.credentials

Description

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.143. .spec.receivers[].opsgenieConfigs[].httpConfig.basicAuth

Description

BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

3.1.144. .spec.receivers[].opsgenieConfigs[].httpConfig.basicAuth.password

Description

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.145. `.spec.receivers[].opsgenieConfigs[].httpConfig.basicAuth.username`

Description

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.146. .spec.receivers[].opsgenieConfigs[].httpConfig.bearerTokenSecret

Description

The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.147. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2

Description

OAuth2 client credentials used to fetch a token for the targets.

Type

object

Required

- **clientId**
- **clientSecret**
- **tokenUrl**

Property	Type	Description

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Property	Type	Description
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

3.1.148. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.149. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.150. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.clientId.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.151. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.152. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.153. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.proxyConnectHeader{}

Description

Type

array

3.1.154. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.proxyConnectHeader{}

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.155. `.spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.tlsConfig`

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus $\geq$ v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus $\geq$ v2.41.0 or Thanos $\geq$ v0.31.0.

Property	Type	Description
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.156. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.157. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.158. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.159. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.160. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.tlsConfig.cert.configM

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.161. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.162. .spec.receivers[].opsgenieConfigs[].httpConfig.oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.163. .spec.receivers[].opsgenieConfigs[].httpConfig.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.164. .spec.receivers[].opsgenieConfigs[].httpConfig.proxyConnectHeader{}

Description

Type

array

3.1.165. .spec.receivers[].opsgenieConfigs[].httpConfig.proxyConnectHeader{}{}

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.166. .spec.receivers[].opsgenieConfigs[].httpConfig.tlsConfig

Description

TLS configuration for the client.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.167. `.spec.receivers[].opsgenieConfigs[].httpConfig.tlsConfig.ca`

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.168. `.spec.receivers[].opsgenieConfigs[].httpConfig.tlsConfig.ca.configMap`

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.169. .spec.receivers[].opsgenieConfigs[].httpConfig.tlsConfig.ca.secret**Description**

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.170. .spec.receivers[].opsgenieConfigs[].httpConfig.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.171. .spec.receivers[].opsgenieConfigs[].httpConfig.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.172. .spec.receivers[].opsgenieConfigs[].httpConfig.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.173. .spec.receivers[].opsgenieConfigs[].httpConfig.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.174. `.spec.receivers[].opsgenieConfigs[].responders`

Description

List of responders responsible for notifications.

Type

array3.1.175. `.spec.receivers[].opsgenieConfigs[].responders[]`

Description

OpsGenieConfigResponder defines a responder to an incident. One of **id**, **name** or **username** has to be defined.

Type

object

Required

- **type**

Property	Type	Description
id	string	ID of the responder.

Property	Type	Description
name	string	Name of the responder.
type	string	Type of responder.
username	string	Username of the responder.

3.1.176. .spec.receivers[].pagerdutyConfigs

Description

List of PagerDuty configurations.

Type

array

3.1.177. .spec.receivers[].pagerdutyConfigs[]

Description

PagerDutyConfig configures notifications via PagerDuty. See https://prometheus.io/docs/alerting/latest/configuration/#pagerduty_config

Type

object

Property	Type	Description
class	string	The class/type of the event.
client	string	Client identification.
clientURL	string	Backlink to the sender of notification.
component	string	The part or component of the affected system that is broken.
description	string	Description of the incident.
details	array	Arbitrary key/value pairs that provide further detail about the incident.
details[]	object	KeyValue defines a (key, value) tuple.
group	string	A cluster or grouping of sources.

Property	Type	Description
httpConfig	object	HTTP client configuration.
pagerDutyImageConfigs	array	A list of image details to attach that provide further detail about an incident.
pagerDutyImageConfigs[]	object	PagerDutyImageConfig attaches images to an incident
pagerDutyLinkConfigs	array	A list of link details to attach that provide further detail about an incident.
pagerDutyLinkConfigs[]	object	PagerDutyLinkConfig attaches text links to an incident
routingKey	object	The secret's key that contains the PagerDuty integration key (when using Events API v2). Either this field or serviceKey needs to be defined. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
sendResolved	boolean	Whether or not to notify about resolved alerts.
serviceKey	object	The secret's key that contains the PagerDuty service key (when using integration type "Prometheus"). Either this field or routingKey needs to be defined. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
severity	string	Severity of the incident.
source	string	Unique location of the affected system.
url	string	The URL to send requests to.

3.1.178. .spec.receivers[].pagerdutyConfigs[].details

Description

Arbitrary key/value pairs that provide further detail about the incident.

Type

array

3.1.179. .spec.receivers[].pagerdutyConfigs[].details[]**Description**

KeyValue defines a (key, value) tuple.

Type

object

Required

- **key**
- **value**

Property	Type	Description
key	string	Key of the tuple.
value	string	Value of the tuple.

3.1.180. .spec.receivers[].pagerdutyConfigs[].httpConfig**Description**

HTTP client configuration.

Type

object

Property	Type	Description
authorization	object	Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.
basicAuth	object	BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.

Property	Type	Description
bearerTokenSecret	object	The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
followRedirects	boolean	FollowRedirects specifies whether the client should follow HTTP 3xx redirects.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus $\geq$ v2.43.0, Alertmanager $\geq$ v0.25.0 or Thanos $\geq$ v0.32.0.
oauth2	object	OAuth2 client credentials used to fetch a token for the targets.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus $\geq$ v2.43.0, Alertmanager $\geq$ v0.25.0 or Thanos $\geq$ v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus $\geq$ v2.43.0, Alertmanager $\geq$ v0.25.0 or Thanos $\geq$ v0.32.0.

Property	Type	Description
proxyURL	string	Optional proxy URL. If defined, this field takes precedence over proxyUrl .
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
tlsConfig	object	TLS configuration for the client.

3.1.181. .spec.receivers[].pagerdutyConfigs[].httpConfig.authorization

Description

Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

3.1.182. .spec.receivers[].pagerdutyConfigs[].httpConfig.authorization.credentials

Description

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.183. .spec.receivers[].pagerdutyConfigs[].httpConfig.basicAuth

Description

BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

3.1.184. .spec.receivers[].pagerdutyConfigs[].httpConfig.basicAuth.password

Description

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.185. .spec.receivers[].pagerdutyConfigs[].httpConfig.basicAuth.username

Description

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.186. .spec.receivers[].pagerdutyConfigs[].httpConfig.bearerTokenSecret

Description

The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.187. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2

Description

OAuth2 client credentials used to fetch a token for the targets.

Type

object

Required

- **clientId**
- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Property	Type	Description
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.

Property	Type	Description
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

3.1.188. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.189. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.190. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.clientId.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.191. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object**Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.192. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.proxyConnectHeader**Description**

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type**object****3.1.193. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.proxyConnectHeader****Description****Type****array****3.1.194. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.proxyConnectHeader []****Description**

SecretKeySelector selects a key of a Secret.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.195. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.tlsConfig

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.

Property	Type	Description
serverName	string	Used to verify the hostname for the targets.

3.1.196. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.197. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.198. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.tlsConfig.ca.secret**Description**

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.199. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.tlsConfig.cert**Description**

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.200. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.tlsConfig.cert.config**Description**

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.201. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.202. .spec.receivers[].pagerdutyConfigs[].httpConfig.oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.203. .spec.receivers[].pagerdutyConfigs[].httpConfig.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.204. .spec.receivers[].pagerdutyConfigs[].httpConfig.proxyConnectHeader{}

Description

Type

array**3.1.205. .spec.receivers[].pagerdutyConfigs[].httpConfig.proxyConnectHeader{}}[]****Description**

SecretKeySelector selects a key of a Secret.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.206. .spec.receivers[].pagerdutyConfigs[].httpConfig.tlsConfig**Description**

TLS configuration for the client.

Type**object**

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.

Property	Type	Description
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.207. .spec.receivers[].pagerdutyConfigs[].httpConfig.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.208. .spec.receivers[].pagerdutyConfigs[].httpConfig.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.209. .spec.receivers[].pagerdutyConfigs[].httpConfig.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.210. .spec.receivers[].pagerdutyConfigs[].httpConfig.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.211. .spec.receivers[].pagerdutyConfigs[].httpConfig.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.212. .spec.receivers[].pagerdutyConfigs[].httpConfig.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.213. .spec.receivers[].pagerdutyConfigs[].httpConfig.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.214. .spec.receivers[].pagerdutyConfigs[].pagerDutyImageConfigs

Description

A list of image details to attach that provide further detail about an incident.

Type

array

3.1.215. .spec.receivers[].pagerdutyConfigs[].pagerDutyImageConfigs[]

Description

PagerDutyImageConfig attaches images to an incident

Type

object

Property	Type	Description
alt	string	Alt is the optional alternative text for the image.
href	string	Optional URL; makes the image a clickable link.
src	string	Src of the image being attached to the incident

3.1.216. .spec.receivers[].pagerdutyConfigs[].pagerDutyLinkConfigs

Description

A list of link details to attach that provide further detail about an incident.

Type

array

3.1.217. .spec.receivers[].pagerdutyConfigs[].pagerDutyLinkConfigs[]

Description

PagerDutyLinkConfig attaches text links to an incident

Type

object

Property	Type	Description
alt	string	Text that describes the purpose of the link, and can be used as the link's text.

Property	Type	Description
href	string	Href is the URL of the link to be attached

3.1.218. .spec.receivers[].pagerdutyConfigs[].routingKey

Description

The secret's key that contains the PagerDuty integration key (when using Events API v2). Either this field or **serviceKey** needs to be defined. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.219. .spec.receivers[].pagerdutyConfigs[].serviceKey

Description

The secret's key that contains the PagerDuty service key (when using integration type "Prometheus"). Either this field or **routingKey** needs to be defined. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.220. .spec.receivers[].pushoverConfigs

Description

List of Pushover configurations.

Type

array

3.1.221. .spec.receivers[].pushoverConfigs[]

Description

PushoverConfig configures notifications via Pushover. See

https://prometheus.io/docs/alerting/latest/configuration/#pushover_config

Type

object

Property	Type	Description
device	string	The name of a device to send the notification to
expire	string	How long your notification will continue to be retried for, unless the user acknowledges the notification.
html	boolean	Whether notification message is HTML or plain text.
httpConfig	object	HTTP client configuration.
message	string	Notification message.
priority	string	Priority, see https://pushover.net/api#priority

Property	Type	Description
retry	string	How often the Pushover servers will send the same notification to the user. Must be at least 30 seconds.
sendResolved	boolean	Whether or not to notify about resolved alerts.
sound	string	The name of one of the sounds supported by device clients to override the user's default sound choice
title	string	Notification title.
token	object	The secret's key that contains the registered application's API token, see https://pushover.net/apps . The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator. Either token or tokenFile is required.
tokenFile	string	The token file that contains the registered application's API token, see https://pushover.net/apps . Either token or tokenFile is required. It requires Alertmanager >= v0.26.0.
ttl	string	The time to live definition for the alert notification
url	string	A supplementary URL shown alongside the message.
urlTitle	string	A title for supplementary URL, otherwise just the URL is shown
userKey	object	The secret's key that contains the recipient user's user key. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator. Either userKey or userKeyFile is required.

Property	Type	Description
userKeyFile	string	The user key file that contains the recipient user's user key. Either userKey or userKeyFile is required. It requires Alertmanager >= v0.26.0.

3.1.222. .spec.receivers[].pushoverConfigs[].httpConfig

Description

HTTP client configuration.

Type

object

Property	Type	Description
authorization	object	Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.
basicAuth	object	BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.
bearerTokenSecret	object	The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
followRedirects	boolean	FollowRedirects specifies whether the client should follow HTTP 3xx redirects.

Property	Type	Description
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
oauth2	object	OAuth2 client credentials used to fetch a token for the targets.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyURL	string	Optional proxy URL. If defined, this field takes precedence over proxyUrl.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
tlsConfig	object	TLS configuration for the client.

3.1.223. .spec.receivers[].pushoverConfigs[].httpConfig.authorization

Description

Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

3.1.224. .spec.receivers[].pushoverConfigs[].httpConfig.authorization.credentials**Description**

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.225. .spec.receivers[].pushoverConfigs[].httpConfig.basicAuth

Description

BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

3.1.226. .spec.receivers[].pushoverConfigs[].httpConfig.basicAuth.password**Description**

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.227. .spec.receivers[].pushoverConfigs[].httpConfig.basicAuth.username**Description**

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.228. .spec.receivers[].pushoverConfigs[].httpConfig.bearerTokenSecret

Description

The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.229. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2

Description

OAuth2 client credentials used to fetch a token for the targets.

Type

object

Required

- **clientId**
- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	

Property	Type	Description
proxyConnectHeader{} []	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

3.1.230. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.231. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.232. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.clientId.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.233. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.234. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object3.1.235. `.spec.receivers[].pushoverConfigs[].httpConfig.oauth2.proxyConnectHeader{`

Description

Type

array3.1.236. `.spec.receivers[].pushoverConfigs[].httpConfig.oauth2.proxyConnectHeader{
[]`

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.237. `.spec.receivers[].pushoverConfigs[].httpConfig.oauth2.tlsConfig`

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.238. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.239. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.tlsConfig.ca.configMa

Description

ConfigMap containing data to use for the targets.

Type

object**Required**

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.240. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.tlsConfig.ca.secret**Description**

Secret containing data to use for the targets.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.241. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.242. .spec.receivers[].pushoverConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.243. `.spec.receivers[].pushoverConfigs[].httpConfig.oauth2.tlsConfig.cert.secret`

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.244. `.spec.receivers[].pushoverConfigs[].httpConfig.oauth2.tlsConfig.keySecret`

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.245. .spec.receivers[].pushoverConfigs[].httpConfig.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.246. .spec.receivers[].pushoverConfigs[].httpConfig.proxyConnectHeader{}

Description

Type

array

3.1.247. .spec.receivers[].pushoverConfigs[].httpConfig.proxyConnectHeader{[]}[]

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.248. .spec.receivers[].pushoverConfigs[].httpConfig.tlsConfig

Description

TLS configuration for the client.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.

Property	Type	Description
serverName	string	Used to verify the hostname for the targets.

3.1.249. .spec.receivers[].pushoverConfigs[].httpConfig.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.250. .spec.receivers[].pushoverConfigs[].httpConfig.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.251. .spec.receivers[].pushoverConfigs[].httpConfig.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.252. .spec.receivers[].pushoverConfigs[].httpConfig.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.253. .spec.receivers[].pushoverConfigs[].httpConfig.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.254. .spec.receivers[].pushoverConfigs[].httpConfig.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.255. .spec.receivers[].pushoverConfigs[].httpConfig.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.256. .spec.receivers[].pushoverConfigs[].token

Description

The secret's key that contains the registered application's API token, see <https://pushover.net/apps>. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator. Either **token** or **tokenFile** is required.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.257. .spec.receivers[].pushoverConfigs[].userKey

Description

The secret's key that contains the recipient user's user key. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator. Either **userKey** or **userKeyFile** is required.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.258. .spec.receivers[].rocketchatConfigs

Description

List of RocketChat configurations. It requires Alertmanager >= 0.28.0.

Type

array

3.1.259. .spec.receivers[].rocketchatConfigs[]

Description

RocketChatConfig configures notifications via RocketChat. It requires Alertmanager >= 0.28.0.

Type

object

Required

- **token**
- **tokenID**

Property	Type	Description
actions	array	Actions to include in the message.
actions[]	object	RocketChatActionConfig defines actions for RocketChat messages.
apiURL	string	The API URL for RocketChat. Defaults to https://open.rocket.chat/ if not specified.
channel	string	The channel to send alerts to.
color	string	The message color.
emoji	string	If provided, the avatar will be displayed as an emoji.
fields	array	Additional fields for the message.
fields[]	object	RocketChatFieldConfig defines a field for RocketChat messages.
httpConfig	object	HTTP client configuration.
iconURL	string	Icon URL for the message.
imageURL	string	Image URL for the message.
linkNames	boolean	Whether to enable link names.
sendResolved	boolean	Whether to notify about resolved alerts.
shortFields	boolean	Whether to use short fields.
text	string	The main message text.
thumbURL	string	Thumbnail URL for the message.
title	string	The message title.

Property	Type	Description
titleLink	string	The title link for the message.
token	object	The sender token.
tokenID	object	The sender token ID.

3.1.260. .spec.receivers[].rocketchatConfigs[].actions

Description

Actions to include in the message.

Type

array

3.1.261. .spec.receivers[].rocketchatConfigs[].actions[]

Description

RocketChatActionConfig defines actions for RocketChat messages.

Type

object

Property	Type	Description
msg	string	The message to send when the button is clicked.
text	string	The button text.
url	string	The URL the button links to.

3.1.262. .spec.receivers[].rocketchatConfigs[].fields

Description

Additional fields for the message.

Type

array

3.1.263. .spec.receivers[].rocketchatConfigs[].fields[]

Description

RocketChatFieldConfig defines a field for RocketChat messages.

Type

object

Property	Type	Description
short	boolean	Whether the field is displayed in a compact form.
title	string	The field title.
value	string	The field value.

3.1.264. .spec.receivers[].rocketchatConfigs[].httpConfig

Description

HTTP client configuration.

Type

object

Property	Type	Description
authorization	object	Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.
basicAuth	object	BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.
bearerTokenSecret	object	The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
followRedirects	boolean	FollowRedirects specifies whether the client should follow HTTP 3xx redirects.

Property	Type	Description
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
oauth2	object	OAuth2 client credentials used to fetch a token for the targets.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyURL	string	Optional proxy URL. If defined, this field takes precedence over proxyUrl.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
tlsConfig	object	TLS configuration for the client.

3.1.265. .spec.receivers[].rocketchatConfigs[].httpConfig.authorization

Description

Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

3.1.266. .spec.receivers[].rocketchatConfigs[].httpConfig.authorization.credentials

Description

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.267. .spec.receivers[].rocketchatConfigs[].httpConfig.basicAuth

Description

BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

3.1.268. .spec.receivers[].rocketchatConfigs[].httpConfig.basicAuth.password

Description

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.269. .spec.receivers[].rocketchatConfigs[].httpConfig.basicAuth.username

Description

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.270. .spec.receivers[].rocketchatConfigs[].httpConfig.bearerTokenSecret**Description**

The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	The name of the secret in the object's namespace to select from.

3.1.271. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2

Description

OAuth2 client credentials used to fetch a token for the targets.

Type

object

Required

- **clientId**
- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Property	Type	Description
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

3.1.272. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.273. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.274. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.clientId.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.275. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.276. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.proxyConnectHeade

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.277. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.proxyConnectHeade**Description****Type**

array

3.1.278. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.proxyConnectHeade []**Description**

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.279. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.tlsConfig**Description**

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.280. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.tlsConfig.ca**Description**

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.281. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap**Description**

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.282. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.283. `.spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.tlsConfig.cert`

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.284. `.spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.tlsConfig.cert.config`

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.285. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.286. .spec.receivers[].rocketchatConfigs[].httpConfig.oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.287. `.spec.receivers[].rocketchatConfigs[].httpConfig.proxyConnectHeader`

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus $\geq$ v2.43.0, Alertmanager $\geq$ v0.25.0 or Thanos $\geq$ v0.32.0.

Type

object

3.1.288. `.spec.receivers[].rocketchatConfigs[].httpConfig.proxyConnectHeader{}`

Description

Type

array

3.1.289. `.spec.receivers[].rocketchatConfigs[].httpConfig.proxyConnectHeader{}[]`

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.290. .spec.receivers[].rocketchatConfigs[].httpConfig.tlsConfig

Description

TLS configuration for the client.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.

Property	Type	Description
serverName	string	Used to verify the hostname for the targets.

3.1.291. .spec.receivers[].rocketchatConfigs[].httpConfig.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.292. .spec.receivers[].rocketchatConfigs[].httpConfig.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.293. .spec.receivers[].rocketchatConfigs[].httpConfig.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.294. .spec.receivers[].rocketchatConfigs[].httpConfig.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.295. .spec.receivers[].rocketchatConfigs[].httpConfig.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.296. .spec.receivers[].rocketchatConfigs[].httpConfig.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.297. .spec.receivers[].rocketchatConfigs[].httpConfig.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.298. .spec.receivers[].rocketchatConfigs[].token

Description

The sender token.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.299. .spec.receivers[].rocketchatConfigs[].tokenID

Description

The sender token ID.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.300. .spec.receivers[].slackConfigs

Description

List of Slack configurations.

Type

array

3.1.301. .spec.receivers[].slackConfigs[]**Description**

SlackConfig configures notifications via Slack. See https://prometheus.io/docs/alerting/latest/configuration/#slack_config

Type

object

Property	Type	Description
actions	array	A list of Slack actions that are sent with each notification.
actions[]	object	SlackAction configures a single Slack action that is sent with each notification. See https://api.slack.com/docs/message-attachments#action_fields and https://api.slack.com/docs/message-buttons for more information.
apiURL	object	The secret's key that contains the Slack webhook URL. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
callbackId	string	
channel	string	The channel or user to send notifications to.
color	string	
fallback	string	
fields	array	A list of Slack fields that are sent with each notification.

Property	Type	Description
fields[]	object	SlackField configures a single Slack field that is sent with each notification. Each field must contain a title, value, and optionally, a boolean value to indicate if the field is short enough to be displayed next to other fields designated as short. See https://api.slack.com/docs/message-attachments#fields for more information.
footer	string	
httpConfig	object	HTTP client configuration.
iconEmoji	string	
iconURL	string	
imageURL	string	
linkNames	boolean	
mrkdwnIn	array (string)	
pretext	string	
sendResolved	boolean	Whether or not to notify about resolved alerts.
shortFields	boolean	
text	string	
thumbURL	string	
title	string	
titleLink	string	
username	string	

3.1.302. .spec.receivers[].slackConfigs[].actions

Description

A list of Slack actions that are sent with each notification.

Type

array

3.1.303. .spec.receivers[].slackConfigs[].actions[]

Description

SlackAction configures a single Slack action that is sent with each notification. See https://api.slack.com/docs/message-attachments#action_fields and <https://api.slack.com/docs/message-buttons> for more information.

Type

object

Required

- **text**
- **type**

Property	Type	Description
confirm	object	SlackConfirmationField protect users from destructive actions or particularly distinguished decisions by asking them to confirm their button click one more time. See https://api.slack.com/docs/interactive-message-field-guide#confirmation_fields for more information.
name	string	
style	string	
text	string	
type	string	
url	string	
value	string	

3.1.304. .spec.receivers[].slackConfigs[].actions[].confirm

Description

SlackConfirmationField protect users from destructive actions or particularly distinguished decisions by asking them to confirm their button click one more time. See https://api.slack.com/docs/interactive-message-field-guide#confirmation_fields for more information.

Type

object

Required

- **text**

Property	Type	Description
dismissText	string	
okText	string	
text	string	
title	string	

3.1.305. .spec.receivers[].slackConfigs[].apiURL

Description

The secret's key that contains the Slack webhook URL. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.306. .spec.receivers[].slackConfigs[].fields

Description

A list of Slack fields that are sent with each notification.

Type

array

3.1.307. .spec.receivers[].slackConfigs[].fields[]

Description

SlackField configures a single Slack field that is sent with each notification. Each field must contain a title, value, and optionally, a boolean value to indicate if the field is short enough to be displayed next to other fields designated as short. See <https://api.slack.com/docs/message-attachments#fields> for more information.

Type

object

Required

- **title**
- **value**

Property	Type	Description
short	boolean	
title	string	
value	string	

3.1.308. .spec.receivers[].slackConfigs[].httpConfig

Description

HTTP client configuration.

Type

object

Property	Type	Description
authorization	object	Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.
basicAuth	object	BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.

Property	Type	Description
bearerTokenSecret	object	The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
followRedirects	boolean	FollowRedirects specifies whether the client should follow HTTP 3xx redirects.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
oauth2	object	OAuth2 client credentials used to fetch a token for the targets.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Property	Type	Description
proxyURL	string	Optional proxy URL. If defined, this field takes precedence over proxyUrl .
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
tlsConfig	object	TLS configuration for the client.

3.1.309. .spec.receivers[].slackConfigs[].httpConfig.authorization

Description

Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

3.1.310. .spec.receivers[].slackConfigs[].httpConfig.authorization.credentials

Description

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.311. .spec.receivers[].slackConfigs[].httpConfig.basicAuth

Description

BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

3.1.312. .spec.receivers[].slackConfigs[].httpConfig.basicAuth.password

Description

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.313. .spec.receivers[].slackConfigs[].httpConfig.basicAuth.username

Description

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.314. .spec.receivers[].slackConfigs[].httpConfig.bearerTokenSecret

Description

The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.315. .spec.receivers[].slackConfigs[].httpConfig.oauth2

Description

OAuth2 client credentials used to fetch a token for the targets.

Type

object

Required

- **clientId**
- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Property	Type	Description
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.

Property	Type	Description
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

3.1.316. .spec.receivers[].slackConfigs[].httpConfig.oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.317. .spec.receivers[].slackConfigs[].httpConfig.oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.318. .spec.receivers[].slackConfigs[].httpConfig.oauth2.clientId.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.319. .spec.receivers[].slackConfigs[].httpConfig.oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object**Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.320. .spec.receivers[].slackConfigs[].httpConfig.oauth2.proxyConnectHeader**Description**

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type**object****3.1.321. .spec.receivers[].slackConfigs[].httpConfig.oauth2.proxyConnectHeader{}****Description****Type****array****3.1.322. .spec.receivers[].slackConfigs[].httpConfig.oauth2.proxyConnectHeader{}**
[]**Description**

SecretKeySelector selects a key of a Secret.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.323. .spec.receivers[].slackConfigs[].httpConfig.oauth2.tlsConfig

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.

Property	Type	Description
serverName	string	Used to verify the hostname for the targets.

3.1.324. .spec.receivers[].slackConfigs[].httpConfig.oauth2.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.325. .spec.receivers[].slackConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.326. .spec.receivers[].slackConfigs[].httpConfig.oauth2.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.327. .spec.receivers[].slackConfigs[].httpConfig.oauth2.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.328. .spec.receivers[].slackConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.329. .spec.receivers[].slackConfigs[].httpConfig.oauth2.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.330. .spec.receivers[].slackConfigs[].httpConfig.oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.331. .spec.receivers[].slackConfigs[].httpConfig.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.332. .spec.receivers[].slackConfigs[].httpConfig.proxyConnectHeader{}

Description

Type

array**3.1.333. .spec.receivers[].slackConfigs[].httpConfig.proxyConnectHeader{ }[]****Description**

SecretKeySelector selects a key of a Secret.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.334. .spec.receivers[].slackConfigs[].httpConfig.tlsConfig**Description**

TLS configuration for the client.

Type**object**

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.

Property	Type	Description
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.335. .spec.receivers[].slackConfigs[].httpConfig.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.336. .spec.receivers[].slackConfigs[].httpConfig.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.337. .spec.receivers[].slackConfigs[].httpConfig.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.338. .spec.receivers[].slackConfigs[].httpConfig.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.339. .spec.receivers[].slackConfigs[].httpConfig.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.340. .spec.receivers[].slackConfigs[].httpConfig.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.341. .spec.receivers[].slackConfigs[].httpConfig.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.342. .spec.receivers[].snsConfigs

Description

List of SNS configurations

Type

array

3.1.343. .spec.receivers[].snsConfigs[]

Description

SNSConfig configures notifications via AWS SNS. See

https://prometheus.io/docs/alerting/latest/configuration/#sns_configs

Type

object

Property	Type	Description
apiURL	string	The SNS API URL i.e. https://sns.us-east-2.amazonaws.com . If not specified, the SNS API URL from the SNS SDK will be used.
attributes	object (string)	SNS message attributes.
httpConfig	object	HTTP client configuration.
message	string	The message content of the SNS notification.
phoneNumber	string	Phone number if message is delivered via SMS in E.164 format. If you don't specify this value, you must specify a value for the TopicARN or TargetARN.
sendResolved	boolean	Whether or not to notify about resolved alerts.
sigv4	object	Configures AWS's Signature Verification 4 signing process to sign requests.
subject	string	Subject line when the message is delivered to email endpoints.

Property	Type	Description
targetARN	string	The mobile platform endpoint ARN if message is delivered via mobile notifications. If you don't specify this value, you must specify a value for the <code>topic_arn</code> or <code>PhoneNumber</code> .
topicARN	string	SNS topic ARN, i.e. <code>arn:aws:sns:us-east-2:698519295917:My-Topic</code> If you don't specify this value, you must specify a value for the <code>PhoneNumber</code> or <code>TargetARN</code> .

3.1.344. `.spec.receivers[].snsConfigs[].httpConfig`

Description

HTTP client configuration.

Type

object

Property	Type	Description
authorization	object	Authorization header configuration for the client. This is mutually exclusive with <code>BasicAuth</code> and is only available starting from Alertmanager v0.22+.
basicAuth	object	BasicAuth for the client. This is mutually exclusive with <code>Authorization</code> . If both are defined, <code>BasicAuth</code> takes precedence.
bearerTokenSecret	object	The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the <code>AlertmanagerConfig</code> object and accessible by the Prometheus Operator.
followRedirects	boolean	<code>FollowRedirects</code> specifies whether the client should follow HTTP 3xx redirects.

Property	Type	Description
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
oauth2	object	OAuth2 client credentials used to fetch a token for the targets.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyURL	string	Optional proxy URL. If defined, this field takes precedence over proxyUrl.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
tlsConfig	object	TLS configuration for the client.

3.1.345. .spec.receivers[].snsConfigs[].httpConfig.authorization

Description

Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

3.1.346. .spec.receivers[].snsConfigs[].httpConfig.authorization.credentials**Description**

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.347. .spec.receivers[].snsConfigs[].httpConfig.basicAuth

Description

BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

3.1.348. .spec.receivers[].snsConfigs[].httpConfig.basicAuth.password**Description**

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.349. .spec.receivers[].snsConfigs[].httpConfig.basicAuth.username**Description**

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.350. .spec.receivers[].snsConfigs[].httpConfig.bearerTokenSecret

Description

The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.351. .spec.receivers[].snsConfigs[].httpConfig.oauth2

Description

OAuth2 client credentials used to fetch a token for the targets.

Type

object

Required

- **clientId**
- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	

Property	Type	Description
proxyConnectHeader{} []	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

3.1.352. .spec.receivers[].snsConfigs[].httpConfig.oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.353. .spec.receivers[].snsConfigs[].httpConfig.oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.354. .spec.receivers[].snsConfigs[].httpConfig.oauth2.clientId.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.355. .spec.receivers[].snsConfigs[].httpConfig.oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.356. .spec.receivers[].snsConfigs[].httpConfig.oauth2.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.357. `.spec.receivers[].snsConfigs[].httpConfig.oauth2.proxyConnectHeader{}`

Description

Type

array

3.1.358. `.spec.receivers[].snsConfigs[].httpConfig.oauth2.proxyConnectHeader{}[]`

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.359. `.spec.receivers[].snsConfigs[].httpConfig.oauth2.tlsConfig`

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.360. .spec.receivers[].snsConfigs[].httpConfig.oauth2.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.361. .spec.receivers[].snsConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.362. .spec.receivers[].snsConfigs[].httpConfig.oauth2.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.363. `.spec.receivers[].snsConfigs[].httpConfig.oauth2.tlsConfig.cert`

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.364. `.spec.receivers[].snsConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap`

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.365. .spec.receivers[].snsConfigs[].httpConfig.oauth2.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.366. .spec.receivers[].snsConfigs[].httpConfig.oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.367. .spec.receivers[].snsConfigs[].httpConfig.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.368. .spec.receivers[].snsConfigs[].httpConfig.proxyConnectHeader{}

Description

Type

array

3.1.369. .spec.receivers[].snsConfigs[].httpConfig.proxyConnectHeader{}[]

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.370. .spec.receivers[].snsConfigs[].httpConfig.tlsConfig

Description

TLS configuration for the client.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.

Property	Type	Description
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.371. .spec.receivers[].snsConfigs[].httpConfig.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.372. .spec.receivers[].snsConfigs[].httpConfig.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.373. .spec.receivers[].snsConfigs[].httpConfig.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.374. .spec.receivers[].snsConfigs[].httpConfig.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.375. .spec.receivers[].snsConfigs[].httpConfig.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.376. .spec.receivers[].snsConfigs[].httpConfig.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.377. .spec.receivers[].snsConfigs[].httpConfig.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.378. .spec.receivers[].snsConfigs[].sigv4

Description

Configures AWS's Signature Verification 4 signing process to sign requests.

Type

object

Property	Type	Description
accessKey	object	AccessKey is the AWS API key. If not specified, the environment variable AWS_ACCESS_KEY_ID is used.
profile	string	Profile is the named AWS profile used to authenticate.
region	string	Region is the AWS region. If blank, the region from the default credentials chain used.
roleArn	string	RoleArn is the named AWS profile used to authenticate.
secretKey	object	SecretKey is the AWS API secret. If not specified, the environment variable AWS_SECRET_ACCESS_KEY is used.

3.1.379. .spec.receivers[].snsConfigs[].sigv4.accessKey**Description**

AccessKey is the AWS API key. If not specified, the environment variable **AWS_ACCESS_KEY_ID** is used.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.380. .spec.receivers[].snsConfigs[].sigv4.secretKey

Description

SecretKey is the AWS API secret. If not specified, the environment variable **AWS_SECRET_ACCESS_KEY** is used.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.381. .spec.receivers[].telegramConfigs

Description

List of Telegram configurations.

Type

array

3.1.382. .spec.receivers[].telegramConfigs[]

Description

TelegramConfig configures notifications via Telegram. See

https://prometheus.io/docs/alerting/latest/configuration/#telegram_config

Type

object

Required

- chatID

Property	Type	Description
apiURL	string	The Telegram API URL i.e. https://api.telegram.org . If not specified, default API URL will be used.
botToken	object	Telegram bot token. It is mutually exclusive with botTokenFile . The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator. Either botToken or botTokenFile is required.
botTokenFile	string	File to read the Telegram bot token from. It is mutually exclusive with botToken . Either botToken or botTokenFile is required. It requires Alertmanager >= v0.26.0.
chatID	integer	The Telegram chat ID.
disableNotifications	boolean	Disable telegram notifications
httpConfig	object	HTTP client configuration.
message	string	Message template

Property	Type	Description
messageThreadID	integer	The Telegram Group Topic ID. It requires Alertmanager $\geq$ 0.26.0.
parseMode	string	Parse mode for telegram message
sendResolved	boolean	Whether to notify about resolved alerts.

3.1.383. .spec.receivers[].telegramConfigs[].botToken

Description

Telegram bot token. It is mutually exclusive with **botTokenFile**. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator. Either **botToken** or **botTokenFile** is required.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.384. .spec.receivers[].telegramConfigs[].httpConfig

Description

HTTP client configuration.

Type

object

Property	Type	Description

Property	Type	Description
authorization	object	Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.
basicAuth	object	BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.
bearerTokenSecret	object	The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
followRedirects	boolean	FollowRedirects specifies whether the client should follow HTTP 3xx redirects.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
oauth2	object	OAuth2 client credentials used to fetch a token for the targets.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Property	Type	Description
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyURL	string	Optional proxy URL. If defined, this field takes precedence over proxyUrl .
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
tlsConfig	object	TLS configuration for the client.

3.1.385. .spec.receivers[].telegramConfigs[].httpConfig.authorization

Description

Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

3.1.386. .spec.receivers[].telegramConfigs[].httpConfig.authorization.credentials

Description

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.387. .spec.receivers[].telegramConfigs[].httpConfig.basicAuth

Description

BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

3.1.388. .spec.receivers[].telegramConfigs[].httpConfig.basicAuth.password

Description

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.389. .spec.receivers[].telegramConfigs[].httpConfig.basicAuth.username**Description**

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.390. .spec.receivers[].telegramConfigs[].httpConfig.bearerTokenSecret

Description

The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.391. .spec.receivers[].telegramConfigs[].httpConfig.oauth2

Description

OAuth2 client credentials used to fetch a token for the targets.

Type

object

Required

- **clientId**

- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.

Property	Type	Description
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

3.1.392. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.393. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.394. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.clientId.secret**Description**

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.395. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.396. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.397. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.proxyConnectHeader{

Description

Type

array

3.1.398. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.proxyConnectHeader{ []

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.399. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.tlsConfig

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.

Property	Type	Description
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.400. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.401. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.402. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.403. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.404. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap**Description**

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.405. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.tlsConfig.cert.secret**Description**

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.406. .spec.receivers[].telegramConfigs[].httpConfig.oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.407. .spec.receivers[].telegramConfigs[].httpConfig.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.408. .spec.receivers[].telegramConfigs[].httpConfig.proxyConnectHeader{}**Description****Type**

array

3.1.409. .spec.receivers[].telegramConfigs[].httpConfig.proxyConnectHeader{}**Description**

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.410. .spec.receivers[].telegramConfigs[].httpConfig.tlsConfig**Description**

TLS configuration for the client.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.411. .spec.receivers[].telegramConfigs[].httpConfig.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.412. .spec.receivers[].telegramConfigs[].httpConfig.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object**Required**

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.413. .spec.receivers[].telegramConfigs[].httpConfig.tlsConfig.ca.secret**Description**

Secret containing data to use for the targets.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.414. .spec.receivers[].telegramConfigs[].httpConfig.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.415. .spec.receivers[].telegramConfigs[].httpConfig.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.416. .spec.receivers[].telegramConfigs[].httpConfig.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.417. .spec.receivers[].telegramConfigs[].httpConfig.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.418. .spec.receivers[].victoropsConfigs

Description

List of VictorOps configurations.

Type

array

3.1.419. .spec.receivers[].victoropsConfigs[]

Description

VictorOpsConfig configures notifications via VictorOps. See https://prometheus.io/docs/alerting/latest/configuration/#victorops_config

Type

object

Property	Type	Description
apiKey	object	The secret's key that contains the API key to use when talking to the VictorOps API. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
apiUrl	string	The VictorOps API URL.
customFields	array	Additional custom fields for notification.

Property	Type	Description
customFields[]	object	KeyValue defines a (key, value) tuple.
entityDisplayName	string	Contains summary of the alerted problem.
httpConfig	object	The HTTP client's configuration.
messageType	string	Describes the behavior of the alert (CRITICAL, WARNING, INFO).
monitoringTool	string	The monitoring tool the state message is from.
routingKey	string	A key used to map the alert to a team.
sendResolved	boolean	Whether or not to notify about resolved alerts.
stateMessage	string	Contains long explanation of the alerted problem.

3.1.420. .spec.receivers[].victoropsConfigs[].apiKey

Description

The secret's key that contains the API key to use when talking to the VictorOps API. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	The name of the secret in the object's namespace to select from.

3.1.421. .spec.receivers[].victoropsConfigs[].customFields

Description

Additional custom fields for notification.

Type

array

3.1.422. .spec.receivers[].victoropsConfigs[].customFields[]

Description

KeyValue defines a (key, value) tuple.

Type

object

Required

- **key**
- **value**

Property	Type	Description
key	string	Key of the tuple.
value	string	Value of the tuple.

3.1.423. .spec.receivers[].victoropsConfigs[].httpConfig

Description

The HTTP client's configuration.

Type

object

Property	Type	Description

Property	Type	Description
authorization	object	Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.
basicAuth	object	BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.
bearerTokenSecret	object	The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
followRedirects	boolean	FollowRedirects specifies whether the client should follow HTTP 3xx redirects.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
oauth2	object	OAuth2 client credentials used to fetch a token for the targets.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	

Property	Type	Description
proxyConnectHeader{}}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyURL	string	Optional proxy URL. If defined, this field takes precedence over proxyUrl .
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
tlsConfig	object	TLS configuration for the client.

3.1.424. .spec.receivers[].victoropsConfigs[].httpConfig.authorization

Description

Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

3.1.425. .spec.receivers[].victoropsConfigs[].httpConfig.authorization.credentials

Description

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.426. .spec.receivers[].victoropsConfigs[].httpConfig.basicAuth

Description

BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

3.1.427. .spec.receivers[].victoropsConfigs[].httpConfig.basicAuth.password

Description

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.428. .spec.receivers[].victoropsConfigs[].httpConfig.basicAuth.username

Description

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.429. .spec.receivers[].victoropsConfigs[].httpConfig.bearerTokenSecret

Description

The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.430. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2

Description

OAuth2 client credentials used to fetch a token for the targets.

Type

object

Required

- **clientId**

- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.

Property	Type	Description
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

3.1.431. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.432. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.433. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.clientId.secret**Description**

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.434. `.spec.receivers[].victoropsConfigs[].httpConfig.oauth2.clientSecret`

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.435. `.spec.receivers[].victoropsConfigs[].httpConfig.oauth2.proxyConnectHeader`

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.436. `.spec.receivers[].victoropsConfigs[].httpConfig.oauth2.proxyConnectHeader`

Description

Type

array

3.1.437. `.spec.receivers[].victoropsConfigs[].httpConfig.oauth2.proxyConnectHeader.selector`

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.438. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.tlsConfig

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.

Property	Type	Description
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.439. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.440. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.tlsConfig.ca.configMa

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.441. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.442. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.443. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap**Description**

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.444. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.tlsConfig.cert.secret**Description**

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.445. .spec.receivers[].victoropsConfigs[].httpConfig.oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.446. .spec.receivers[].victoropsConfigs[].httpConfig.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.447. .spec.receivers[].victoropsConfigs[].httpConfig.proxyConnectHeader{}**Description****Type**

array

3.1.448. .spec.receivers[].victoropsConfigs[].httpConfig.proxyConnectHeader{}[]**Description**

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.449. .spec.receivers[].victoropsConfigs[].httpConfig.tlsConfig**Description**

TLS configuration for the client.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.450. .spec.receivers[].victoropsConfigs[].httpConfig.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.451. .spec.receivers[].victoropsConfigs[].httpConfig.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object**Required**

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.452. .spec.receivers[].victoropsConfigs[].httpConfig.tlsConfig.ca.secret**Description**

Secret containing data to use for the targets.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.453. .spec.receivers[].victoropsConfigs[].httpConfig.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.454. .spec.receivers[].victoropsConfigs[].httpConfig.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.455. .spec.receivers[].victoropsConfigs[].httpConfig.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.456. .spec.receivers[].victoropsConfigs[].httpConfig.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.457. .spec.receivers[].webexConfigs

Description

List of Webex configurations.

Type

array

3.1.458. .spec.receivers[].webexConfigs[]

Description

WebexConfig configures notification via Cisco Webex See

https://prometheus.io/docs/alerting/latest/configuration/#webex_config

Type

object

Required

- **roomId**

Property	Type	Description
apiURL	string	The Webex Teams API URL i.e. https://webexapis.com/v1/messages
httpConfig	object	The HTTP client's configuration. You must use this configuration to supply the bot token as part of the HTTP Authorization header.

Property	Type	Description
message	string	Message template
roomID	string	ID of the Webex Teams room where to send the messages.
sendResolved	boolean	Whether to notify about resolved alerts.

3.1.459. .spec.receivers[].webexConfigs[].httpConfig

Description

The HTTP client's configuration. You must use this configuration to supply the bot token as part of the HTTP **Authorization** header.

Type

object

Property	Type	Description
authorization	object	Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.
basicAuth	object	BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.
bearerTokenSecret	object	The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
followRedirects	boolean	FollowRedirects specifies whether the client should follow HTTP 3xx redirects.

Property	Type	Description
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
oauth2	object	OAuth2 client credentials used to fetch a token for the targets.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyURL	string	Optional proxy URL. If defined, this field takes precedence over proxyUrl.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
tlsConfig	object	TLS configuration for the client.

3.1.460. .spec.receivers[].webexConfigs[].httpConfig.authorization

Description

Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

3.1.461. .spec.receivers[].webexConfigs[].httpConfig.authorization.credentials**Description**

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.462. .spec.receivers[].webexConfigs[].httpConfig.basicAuth

Description

BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

3.1.463. .spec.receivers[].webexConfigs[].httpConfig.basicAuth.password**Description**

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.464. .spec.receivers[].webexConfigs[].httpConfig.basicAuth.username**Description**

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.465. .spec.receivers[].webexConfigs[].httpConfig.bearerTokenSecret

Description

The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.466. .spec.receivers[].webexConfigs[].httpConfig.oauth2

Description

OAuth2 client credentials used to fetch a token for the targets.

Type

object

Required

- **clientId**
- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	

Property	Type	Description
proxyConnectHeader{} []	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

3.1.467. .spec.receivers[].webexConfigs[].httpConfig.oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.468. .spec.receivers[].webexConfigs[].httpConfig.oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.469. .spec.receivers[].webexConfigs[].httpConfig.oauth2.clientId.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.470. .spec.receivers[].webexConfigs[].httpConfig.oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.471. .spec.receivers[].webexConfigs[].httpConfig.oauth2.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.472. .spec.receivers[].webexConfigs[].httpConfig.oauth2.proxyConnectHeader{}

Description

Type

array

3.1.473. .spec.receivers[].webexConfigs[].httpConfig.oauth2.proxyConnectHeader{}

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.474. .spec.receivers[].webexConfigs[].httpConfig.oauth2.tlsConfig

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.475. `.spec.receivers[].webexConfigs[].httpConfig.oauth2.tlsConfig.ca`

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.476. `.spec.receivers[].webexConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap`

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.477. .spec.receivers[].webexConfigs[].httpConfig.oauth2.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.478. .spec.receivers[].webexConfigs[].httpConfig.oauth2.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.479. .spec.receivers[].webexConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.480. .spec.receivers[].webexConfigs[].httpConfig.oauth2.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.481. .spec.receivers[].webexConfigs[].httpConfig.oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.482. .spec.receivers[].webexConfigs[].httpConfig.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.483. .spec.receivers[].webexConfigs[].httpConfig.proxyConnectHeader{}

Description

Type

array

3.1.484. .spec.receivers[].webexConfigs[].httpConfig.proxyConnectHeader{}[]

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.485. .spec.receivers[].webexConfigs[].httpConfig.tlsConfig

Description

TLS configuration for the client.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.

Property	Type	Description
serverName	string	Used to verify the hostname for the targets.

3.1.486. .spec.receivers[].webexConfigs[].httpConfig.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.487. .spec.receivers[].webexConfigs[].httpConfig.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.488. .spec.receivers[].webexConfigs[].httpConfig.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.489. .spec.receivers[].webexConfigs[].httpConfig.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.490. .spec.receivers[].webexConfigs[].httpConfig.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.491. .spec.receivers[].webexConfigs[].httpConfig.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.492. .spec.receivers[].webexConfigs[].httpConfig.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.493. .spec.receivers[].webhookConfigs

Description

List of webhook configurations.

Type

array

3.1.494. .spec.receivers[].webhookConfigs[]

Description

WebhookConfig configures notifications via a generic receiver supporting the webhook payload. See https://prometheus.io/docs/alerting/latest/configuration/#webhook_config

Type

object

Property	Type	Description
httpConfig	object	HTTP client configuration.
maxAlerts	integer	Maximum number of alerts to be sent per webhook message. When 0, all alerts are included.
sendResolved	boolean	Whether or not to notify about resolved alerts.
timeout	string	The maximum time to wait for a webhook request to complete, before failing the request and allowing it to be retried. It requires Alertmanager >= v0.28.0.
url	string	The URL to send HTTP POST requests to. urlSecret takes precedence over url . One of urlSecret and url should be defined.
urlSecret	object	The secret's key that contains the webhook URL to send HTTP requests to. urlSecret takes precedence over url . One of urlSecret and url should be defined. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

3.1.495. .spec.receivers[].webhookConfigs[].httpConfig**Description**

HTTP client configuration.

Type

object

Property	Type	Description

Property	Type	Description
authorization	object	Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.
basicAuth	object	BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.
bearerTokenSecret	object	The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
followRedirects	boolean	FollowRedirects specifies whether the client should follow HTTP 3xx redirects.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus $\geq$ v2.43.0, Alertmanager $\geq$ v0.25.0 or Thanos $\geq$ v0.32.0.
oauth2	object	OAuth2 client credentials used to fetch a token for the targets.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus $\geq$ v2.43.0, Alertmanager $\geq$ v0.25.0 or Thanos $\geq$ v0.32.0.
proxyConnectHeader{}	array	

Property	Type	Description
proxyConnectHeader{}	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyURL	string	Optional proxy URL. If defined, this field takes precedence over proxyUrl .
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
tlsConfig	object	TLS configuration for the client.

3.1.496. .spec.receivers[].webhookConfigs[].httpConfig.authorization

Description

Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

3.1.497. .spec.receivers[].webhookConfigs[].httpConfig.authorization.credentials

Description

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.498. .spec.receivers[].webhookConfigs[].httpConfig.basicAuth**Description**

BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

3.1.499. .spec.receivers[].webhookConfigs[].httpConfig.basicAuth.password**Description**

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.500. .spec.receivers[].webhookConfigs[].httpConfig.basicAuth.username

Description

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.501. .spec.receivers[].webhookConfigs[].httpConfig.bearerTokenSecret

Description

The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.502. .spec.receivers[].webhookConfigs[].httpConfig.oauth2

Description

OAuth2 client credentials used to fetch a token for the targets.

Type

object

Required

- **clientId**
- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.

Property	Type	Description
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

3.1.503. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.504. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.505. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.clientId.secret**Description**

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.506. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.507. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.508. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.proxyConnectHeader{

Description

Type

array

3.1.509. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.proxyConnectHeader{ []

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.510. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.tlsConfig

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.

Property	Type	Description
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.511. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.512. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.513. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.514. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.515. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap:**Description**

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.516. .spec.receivers[].webhookConfigs[].httpConfig.oauth2.tlsConfig.cert.secret:**Description**

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.517. `.spec.receivers[].webhookConfigs[].httpConfig.oauth2.tlsConfig.keySecret`

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.518. `.spec.receivers[].webhookConfigs[].httpConfig.proxyConnectHeader`

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.519. .spec.receivers[].webhookConfigs[].httpConfig.proxyConnectHeader{}**Description****Type**

array

3.1.520. .spec.receivers[].webhookConfigs[].httpConfig.proxyConnectHeader{}**Description**

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.521. .spec.receivers[].webhookConfigs[].httpConfig.tlsConfig**Description**

TLS configuration for the client.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.522. .spec.receivers[].webhookConfigs[].httpConfig.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.523. .spec.receivers[].webhookConfigs[].httpConfig.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.524. .spec.receivers[].webhookConfigs[].httpConfig.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.525. .spec.receivers[].webhookConfigs[].httpConfig.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.526. .spec.receivers[].webhookConfigs[].httpConfig.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.527. .spec.receivers[].webhookConfigs[].httpConfig.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.528. .spec.receivers[].webhookConfigs[].httpConfig.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.529. .spec.receivers[].webhookConfigs[].urlSecret

Description

The secret's key that contains the webhook URL to send HTTP requests to. **urlSecret** takes precedence over **url**. One of **urlSecret** and **url** should be defined. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.530. .spec.receivers[].wechatConfigs

Description

List of WeChat configurations.

Type

array

3.1.531. .spec.receivers[].wechatConfigs[]

Description

WeChatConfig configures notifications via WeChat. See https://prometheus.io/docs/alerting/latest/configuration/#wechat_config

Type

object

Property	Type	Description
agentID	string	
apiSecret	object	The secret's key that contains the WeChat API key. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
apiURL	string	The WeChat API URL.
corpID	string	The corp id for authentication.
httpConfig	object	HTTP client configuration.
message	string	API request data as defined by the WeChat API.
messageType	string	
sendResolved	boolean	Whether or not to notify about resolved alerts.
toParty	string	
toTag	string	
toUser	string	

3.1.532. .spec.receivers[].wechatConfigs[].apiSecret

Description

The secret's key that contains the WeChat API key. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.533. `.spec.receivers[].wechatConfigs[].httpConfig`

Description

HTTP client configuration.

Type

object

Property	Type	Description
authorization	object	Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.
basicAuth	object	BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.
bearerTokenSecret	object	The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.
followRedirects	boolean	FollowRedirects specifies whether the client should follow HTTP 3xx redirects.

Property	Type	Description
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
oauth2	object	OAuth2 client credentials used to fetch a token for the targets.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyURL	string	Optional proxy URL. If defined, this field takes precedence over proxyUrl.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
tlsConfig	object	TLS configuration for the client.

3.1.534. .spec.receivers[].wechatConfigs[].httpConfig.authorization

Description

Authorization header configuration for the client. This is mutually exclusive with BasicAuth and is only available starting from Alertmanager v0.22+.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

3.1.535. .spec.receivers[].wechatConfigs[].httpConfig.authorization.credentials**Description**

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.536. .spec.receivers[].wechatConfigs[].httpConfig.basicAuth

Description

BasicAuth for the client. This is mutually exclusive with Authorization. If both are defined, BasicAuth takes precedence.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

3.1.537. .spec.receivers[].wechatConfigs[].httpConfig.basicAuth.password**Description**

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.538. .spec.receivers[].wechatConfigs[].httpConfig.basicAuth.username**Description**

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.539. .spec.receivers[].wechatConfigs[].httpConfig.bearerTokenSecret

Description

The secret's key that contains the bearer token to be used by the client for authentication. The secret needs to be in the same namespace as the AlertmanagerConfig object and accessible by the Prometheus Operator.

Type

object

Required

- **key**
- **name**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	The name of the secret in the object's namespace to select from.

3.1.540. .spec.receivers[].wechatConfigs[].httpConfig.oauth2

Description

OAuth2 client credentials used to fetch a token for the targets.

Type

object

Required

- **clientId**
- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	

Property	Type	Description
proxyConnectHeader{} []	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

3.1.541. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.542. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.543. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.clientId.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.544. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.545. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

3.1.546. `.spec.receivers[].wechatConfigs[].httpConfig.oauth2.proxyConnectHeader{}`

Description

Type

array

3.1.547. `.spec.receivers[].wechatConfigs[].httpConfig.oauth2.proxyConnectHeader{}`
`[]`

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.548. `.spec.receivers[].wechatConfigs[].httpConfig.oauth2.tlsConfig`

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

3.1.549. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.550. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.551. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.552. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.553. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.554. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.555. .spec.receivers[].wechatConfigs[].httpConfig.oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.556. `.spec.receivers[].wechatConfigs[].httpConfig.proxyConnectHeader`

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus $\geq$ v2.43.0, Alertmanager $\geq$ v0.25.0 or Thanos $\geq$ v0.32.0.

Type

object

3.1.557. `.spec.receivers[].wechatConfigs[].httpConfig.proxyConnectHeader{}`

Description

Type

array

3.1.558. `.spec.receivers[].wechatConfigs[].httpConfig.proxyConnectHeader{[]}[]`

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.559. .spec.receivers[].wechatConfigs[].httpConfig.tlsConfig

Description

TLS configuration for the client.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.

Property	Type	Description
serverName	string	Used to verify the hostname for the targets.

3.1.560. `.spec.receivers[].wechatConfigs[].httpConfig.tlsConfig.ca`

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.561. `.spec.receivers[].wechatConfigs[].httpConfig.tlsConfig.ca.configMap`

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.562. .spec.receivers[].wechatConfigs[].httpConfig.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.563. .spec.receivers[].wechatConfigs[].httpConfig.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

3.1.564. .spec.receivers[].wechatConfigs[].httpConfig.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

3.1.565. .spec.receivers[].wechatConfigs[].httpConfig.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

3.1.566. .spec.receivers[].wechatConfigs[].httpConfig.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

3.1.567. .spec.route

Description

The Alertmanager route definition for alerts matching the resource's namespace. If present, it will be added to the generated Alertmanager configuration as a first-level route.

Type

object

Property	Type	Description
activeTimeIntervals	array (string)	ActiveTimeIntervals is a list of TimeInterval names when this route should be active.

Property	Type	Description
continue	boolean	Boolean indicating whether an alert should continue matching subsequent sibling nodes. It will always be overridden to true for the first-level route by the Prometheus operator.
groupBy	array (string)	List of labels to group by. Labels must not be repeated (unique list). Special label "..." (aggregate by all possible labels), if provided, must be the only element in the list.
groupInterval	string	How long to wait before sending an updated notification. Must match the regular expression <code>^((y)?([0-9])w)?((d)?([0-9])h)?((m)?([0-9])s)?([0-9]+)ms)?\$`</code> Example: "5m"
groupWait	string	How long to wait before sending the initial notification. Must match the regular expression <code>^((y)?([0-9])w)?((d)?([0-9])h)?((m)?([0-9])s)?([0-9]+)ms)?\$`</code> Example: "30s"
matchers	array	List of matchers that the alert's labels should match. For the first level route, the operator removes any existing equality and regexp matcher on the namespace label and adds a namespace: <object namespace> matcher.
matchers[]	object	Matcher defines how to match on alert's labels.

Property	Type	Description
muteTimeIntervals	array (string)	Note: this comment applies to the field definition above but appears below otherwise it gets included in the generated manifest. CRD schema doesn't support self-referential types for now (see https://github.com/kubernetes/kubernetes/issues/62872). We have to use an alternative type to circumvent the limitation. The downside is that the Kube API can't validate the data beyond the fact that it is a valid JSON representation. MuteTimeIntervals is a list of TimeInterval names that will mute this route when matched.
receiver	string	Name of the receiver for this route. If not empty, it should be listed in the receivers field.
repeatInterval	string	How long to wait before repeating the last notification. Must match the regular expression <code>^((y)?([0-9]w)?([0-9]d)?([0-9]h)?([0-9]m)?([0-9]s)?([0-9]+)ms)?\$`</code> Example: "4h"
routes	array (undefined)	Child routes.

3.1.568. .spec.route.matchers

Description

List of matchers that the alert's labels should match. For the first level route, the operator removes any existing equality and regexp matcher on the **namespace** label and adds a **namespace: <object namespace>** matcher.

Type

array

3.1.569. .spec.route.matchers[]

Description

Matcher defines how to match on alert's labels.

Type

object

Required

- **name**

Property	Type	Description
matchType	string	Match operator, one of = (equal to), != (not equal to), =~ (regex match) or !~ (not regex match). Negative operators (!= and !~) require Alertmanager $\geq$ v0.22.0.
name	string	Label to match.
value	string	Label value to match.

3.1.570. .spec.timeIntervals

Description

List of TimeInterval specifying when the routes should be muted or active.

Type

array

3.1.571. .spec.timeIntervals[]

Description

TimeInterval specifies the periods in time when notifications will be muted or active.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name of the time interval.
timeIntervals	array	TimeIntervals is a list of TimePeriod.
timeIntervals[]	object	TimePeriod describes periods of time.

3.1.572. .spec.timeIntervals[].timeIntervals

Description

TimeIntervals is a list of TimePeriod.

Type

array

3.1.573. .spec.timeIntervals[].timeIntervals[]

Description

TimePeriod describes periods of time.

Type

object

Property	Type	Description
daysOfMonth	array	DaysOfMonth is a list of DayOfMonthRange
daysOfMonth[]	object	DayOfMonthRange is an inclusive range of days of the month beginning at 1
months	array (string)	Months is a list of MonthRange
times	array	Times is a list of TimeRange
times[]	object	TimeRange defines a start and end time in 24hr format
weekdays	array (string)	Weekdays is a list of WeekdayRange
years	array (string)	Years is a list of YearRange

3.1.574. .spec.timeIntervals[].timeIntervals[].daysOfMonth

Description

DaysOfMonth is a list of DayOfMonthRange

Type

array

3.1.575. .spec.timeIntervals[].timeIntervals[].daysOfMonth[]

Description

DayOfMonthRange is an inclusive range of days of the month beginning at 1

Type

object

Property	Type	Description
end	integer	End of the inclusive range
start	integer	Start of the inclusive range

3.1.576. .spec.timeIntervals[].timeIntervals[].times

Description

Times is a list of TimeRange

Type

array

3.1.577. .spec.timeIntervals[].timeIntervals[].times[]

Description

TimeRange defines a start and end time in 24hr format

Type

object

Property	Type	Description
endTime	string	EndTime is the end time in 24hr format.
startTime	string	StartTime is the start time in 24hr format.

3.2. API ENDPOINTS

The following API endpoints are available:

- **/apis/monitoring.coreos.com/v1beta1/alertmanagerconfigs**
 - **GET**: list objects of kind AlertmanagerConfig
- **/apis/monitoring.coreos.com/v1beta1/namespaces/{namespace}/alertmanagerconfigs**
 - **DELETE**: delete collection of AlertmanagerConfig
 - **GET**: list objects of kind AlertmanagerConfig
 - **POST**: create an AlertmanagerConfig
- **/apis/monitoring.coreos.com/v1beta1/namespaces/{namespace}/alertmanagerconfigs/{name}**
 - **DELETE**: delete an AlertmanagerConfig

- **GET**: read the specified AlertmanagerConfig
- **PATCH**: partially update the specified AlertmanagerConfig
- **PUT**: replace the specified AlertmanagerConfig

3.2.1. /apis/monitoring.coreos.com/v1beta1/alertmanagerconfigs

HTTP method

GET

Description

list objects of kind AlertmanagerConfig

Table 3.1. HTTP responses

HTTP code	Reponse body
200 - OK	AlertmanagerConfigList schema
401 - Unauthorized	Empty

3.2.2. /apis/monitoring.coreos.com/v1beta1/namespaces/{namespace}/alertmanager

HTTP method

DELETE

Description

delete collection of AlertmanagerConfig

Table 3.2. HTTP responses

HTTP code	Reponse body
200 - OK	Status schema
401 - Unauthorized	Empty

HTTP method

GET

Description

list objects of kind AlertmanagerConfig

Table 3.3. HTTP responses

HTTP code	Reponse body
200 - OK	AlertmanagerConfigList schema

HTTP code	Response body
401 - Unauthorized	Empty

HTTP method**POST****Description**

create an AlertmanagerConfig

Table 3.4. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 3.5. Body parameters

Parameter	Type	Description
body	AlertmanagerConfig schema	

Table 3.6. HTTP responses

HTTP code	Reponse body
200 - OK	AlertmanagerConfig schema
201 - Created	AlertmanagerConfig schema
202 - Accepted	AlertmanagerConfig schema
401 - Unauthorized	Empty

3.2.3. /apis/monitoring.coreos.com/v1beta1/namespaces/{namespace}/alertmanager

Table 3.7. Global path parameters

Parameter	Type	Description
name	string	name of the AlertmanagerConfig

HTTP method

DELETE

Description

delete an AlertmanagerConfig

Table 3.8. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Table 3.9. HTTP responses

HTTP code	Reponse body
200 - OK	Status schema
202 - Accepted	Status schema
401 - Unauthorized	Empty

HTTP method

GET

Description

read the specified AlertmanagerConfig

Table 3.10. HTTP responses

HTTP code	Response body
200 - OK	AlertmanagerConfig schema
401 - Unauthorized	Empty

HTTP method**PATCH****Description**

partially update the specified AlertmanagerConfig

Table 3.11. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 3.12. HTTP responses

HTTP code	Reponse body
200 - OK	AlertmanagerConfig schema
401 - Unauthorized	Empty

HTTP method**PUT****Description**

replace the specified AlertmanagerConfig

Table 3.13. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 3.14. Body parameters

Parameter	Type	Description
body	AlertmanagerConfig schema	

Table 3.15. HTTP responses

HTTP code	Reponse body
200 - OK	AlertmanagerConfig schema
201 - Created	AlertmanagerConfig schema
401 - Unauthorized	Empty

CHAPTER 4. ALERTRELABELCONFIG [MONITORING.OPENSIFT.IO/V1]

Description

AlertRelabelConfig defines a set of relabel configs for alerts.

Compatibility level 1: Stable within a major release for a minimum of 12 months or 3 minor releases (whichever is longer).

Type

object

Required

- **spec**

4.1. SPECIFICATION

Property	Type	Description
apiVersion	string	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	string	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	ObjectMeta	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	object	spec describes the desired state of this AlertRelabelConfig object.

Property	Type	Description
status	object	status describes the current state of this AlertRelabelConfig object.

4.1.1. .spec

Description

spec describes the desired state of this AlertRelabelConfig object.

Type

object

Required

- **configs**

Property	Type	Description
configs	array	configs is a list of sequentially evaluated alert relabel configs.
configs[]	object	RelabelConfig allows dynamic rewriting of label sets for alerts. See Prometheus documentation: - https://prometheus.io/docs/prometheus/latest/configuration/configuration/#alert_relabel_configs - https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

4.1.2. .spec.configs

Description

configs is a list of sequentially evaluated alert relabel configs.

Type

array

4.1.3. .spec.configs[]

Description

RelabelConfig allows dynamic rewriting of label sets for alerts. See Prometheus documentation: - https://prometheus.io/docs/prometheus/latest/configuration/configuration/#alert_relabel_configs - https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

object

Property	Type	Description
action	string	action to perform based on regex matching. Must be one of: 'Replace', 'Keep', 'Drop', 'HashMod', 'LabelMap', 'LabelDrop', or 'LabelKeep'. Default is: 'Replace'
modulus	integer	modulus to take of the hash of the source label values. This can be combined with the 'HashMod' action to set 'target_label' to the 'modulus' of a hash of the concatenated 'source_labels'. This is only valid if sourceLabels is not empty and action is not 'LabelKeep' or 'LabelDrop'.
regex	string	regex against which the extracted value is matched. Default is: '(.*)' regex is required for all actions except 'HashMod'
replacement	string	replacement value against which a regex replace is performed if the regular expression matches. This is required if the action is 'Replace' or 'LabelMap' and forbidden for actions 'LabelKeep' and 'LabelDrop'. Regex capture groups are available. Default is: '\$1'
separator	string	separator placed between concatenated source label values. When omitted, Prometheus will use its default value of ','.
sourceLabels	array (string)	sourceLabels select values from existing labels. Their content is concatenated using the configured separator and matched against the configured regular expression for the 'Replace', 'Keep', and 'Drop' actions. Not allowed for actions 'LabelKeep' and 'LabelDrop'.

Property	Type	Description
targetLabel	string	targetLabel to which the resulting value is written in a 'Replace' action. It is required for 'Replace' and 'HashMod' actions and forbidden for actions 'LabelKeep' and 'LabelDrop'. Regex capture groups are available.

4.1.4. .status

Description

status describes the current state of this AlertRelabelConfig object.

Type

object

Property	Type	Description
conditions	array	conditions contains details on the state of the AlertRelabelConfig, may be empty.
conditions[]	object	Condition contains details for one aspect of the current state of this API Resource.

4.1.5. .status.conditions

Description

conditions contains details on the state of the AlertRelabelConfig, may be empty.

Type

array

4.1.6. .status.conditions[]

Description

Condition contains details for one aspect of the current state of this API Resource.

Type

object

Required

- **lastTransitionTime**
- **message**
- **reason**

- **status**
- **type**

Property	Type	Description
lastTransitionTime	string	lastTransitionTime is the last time the condition transitioned from one status to another. This should be when the underlying condition changed. If that is not known, then using the time when the API field changed is acceptable.
message	string	message is a human readable message indicating details about the transition. This may be an empty string.
observedGeneration	integer	observedGeneration represents the .metadata.generation that the condition was set based upon. For instance, if .metadata.generation is currently 12, but the .status.conditions[x].observedGeneration is 9, the condition is out of date with respect to the current state of the instance.
reason	string	reason contains a programmatic identifier indicating the reason for the condition's last transition. Producers of specific condition types may define expected values and meanings for this field, and whether the values are considered a guaranteed API. The value should be a CamelCase string. This field may not be empty.
status	string	status of the condition, one of True, False, Unknown.
type	string	type of condition in CamelCase or in foo.example.com/CamelCase.

4.2. API ENDPOINTS

The following API endpoints are available:

- **/apis/monitoring.openshift.io/v1/alertrelabelconfigs**

- **GET**: list objects of kind AlertRelabelConfig
- **/apis/monitoring.openshift.io/v1/namespaces/{namespace}/alertrelabelconfigs**
 - **DELETE**: delete collection of AlertRelabelConfig
 - **GET**: list objects of kind AlertRelabelConfig
 - **POST**: create an AlertRelabelConfig
- **/apis/monitoring.openshift.io/v1/namespaces/{namespace}/alertrelabelconfigs/{name}**
 - **DELETE**: delete an AlertRelabelConfig
 - **GET**: read the specified AlertRelabelConfig
 - **PATCH**: partially update the specified AlertRelabelConfig
 - **PUT**: replace the specified AlertRelabelConfig
- **/apis/monitoring.openshift.io/v1/namespaces/{namespace}/alertrelabelconfigs/{name}/status**
 - **GET**: read status of the specified AlertRelabelConfig
 - **PATCH**: partially update status of the specified AlertRelabelConfig
 - **PUT**: replace status of the specified AlertRelabelConfig

4.2.1. /apis/monitoring.openshift.io/v1/alertrelabelconfigs

HTTP method

GET

Description

list objects of kind AlertRelabelConfig

Table 4.1. HTTP responses

HTTP code	Response body
200 - OK	AlertRelabelConfigList schema
401 - Unauthorized	Empty

4.2.2. /apis/monitoring.openshift.io/v1/namespaces/{namespace}/alertrelabelconfigs

HTTP method

DELETE

Description

delete collection of AlertRelabelConfig

Table 4.2. HTTP responses

HTTP code	Reponse body
200 - OK	Status schema
401 - Unauthorized	Empty

HTTP method**GET****Description**

list objects of kind AlertRelabelConfig

Table 4.3. HTTP responses

HTTP code	Reponse body
200 - OK	AlertRelabelConfigList schema
401 - Unauthorized	Empty

HTTP method**POST****Description**

create an AlertRelabelConfig

Table 4.4. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Parameter	Type	Description
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 4.5. Body parameters

Parameter	Type	Description
body	AlertRelabelConfig schema	

Table 4.6. HTTP responses

HTTP code	Response body
200 - OK	AlertRelabelConfig schema
201 - Created	AlertRelabelConfig schema
202 - Accepted	AlertRelabelConfig schema
401 - Unauthorized	Empty

4.2.3. /apis/monitoring.openshift.io/v1/namespaces/{namespace}/alertrelabelconfigs

Table 4.7. Global path parameters

Parameter	Type	Description
name	string	name of the AlertRelabelConfig

HTTP method**DELETE****Description**

delete an AlertRelabelConfig

Table 4.8. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Table 4.9. HTTP responses

HTTP code	Reponse body
200 - OK	Status schema
202 - Accepted	Status schema
401 - Unauthorized	Empty

HTTP method**GET****Description**

read the specified AlertRelabelConfig

Table 4.10. HTTP responses

HTTP code	Reponse body
200 - OK	AlertRelabelConfig schema
401 - Unauthorized	Empty

HTTP method**PATCH****Description**

partially update the specified AlertRelabelConfig

Table 4.11. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 4.12. HTTP responses

HTTP code	Response body
200 - OK	AlertRelabelConfig schema
401 - Unauthorized	Empty

HTTP method**PUT****Description**

replace the specified AlertRelabelConfig

Table 4.13. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Parameter	Type	Description
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 4.14. Body parameters

Parameter	Type	Description
body	AlertRelabelConfig schema	

Table 4.15. HTTP responses

HTTP code	Response body
200 - OK	AlertRelabelConfig schema
201 - Created	AlertRelabelConfig schema
401 - Unauthorized	Empty

4.2.4. /apis/monitoring.openshift.io/v1/namespaces/{namespace}/alertrelabelconfig:

Table 4.16. Global path parameters

Parameter	Type	Description
name	string	name of the AlertRelabelConfig

HTTP method

GET**Description**

read status of the specified AlertRelabelConfig

Table 4.17. HTTP responses

HTTP code	Response body
200 - OK	AlertRelabelConfig schema
401 - Unauthorized	Empty

HTTP method**PATCH****Description**

partially update status of the specified AlertRelabelConfig

Table 4.18. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 4.19. HTTP responses

HTTP code	Response body
200 - OK	AlertRelabelConfig schema
401 - Unauthorized	Empty

HTTP method**PUT****Description**

replace status of the specified AlertRelabelConfig

Table 4.20. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 4.21. Body parameters

Parameter	Type	Description
body	AlertRelabelConfig schema	

Table 4.22. HTTP responses

HTTP code	Reponse body
200 - OK	AlertRelabelConfig schema
201 - Created	AlertRelabelConfig schema
401 - Unauthorized	Empty

CHAPTER 5. ALERTINGRULE [MONITORING.OPENSIFT.IO/V1]

Description

AlertingRule represents a set of user-defined Prometheus rule groups containing alerting rules. This resource is the supported method for cluster admins to create alerts based on metrics recorded by the platform monitoring stack in OpenShift, i.e. the Prometheus instance deployed to the openshift-monitoring namespace. You might use this to create custom alerting rules not shipped with OpenShift based on metrics from components such as the node_exporter, which provides machine-level metrics such as CPU usage, or kube-state-metrics, which provides metrics on Kubernetes usage.

The API is mostly compatible with the upstream PrometheusRule type from the prometheus-operator. The primary difference being that recording rules are not allowed here – only alerting rules. For each AlertingRule resource created, a corresponding PrometheusRule will be created in the openshift-monitoring namespace. OpenShift requires admins to use the AlertingRule resource rather than the upstream type in order to allow better OpenShift specific defaulting and validation, while not modifying the upstream APIs directly.

You can find upstream API documentation for PrometheusRule resources here:

<https://github.com/prometheus-operator/prometheus-operator/blob/main/Documentation/api.md>

Compatibility level 1: Stable within a major release for a minimum of 12 months or 3 minor releases (whichever is longer).

Type

object

Required

- **spec**

5.1. SPECIFICATION

Property	Type	Description
apiVersion	string	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Property	Type	Description
kind	string	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	ObjectMeta	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	object	spec describes the desired state of this AlertingRule object.
status	object	status describes the current state of this AlertOverrides object.

5.1.1. .spec

Description

spec describes the desired state of this AlertingRule object.

Type

object

Required

- **groups**

Property	Type	Description

Property	Type	Description
groups	array	groups is a list of grouped alerting rules. Rule groups are the unit at which Prometheus parallelizes rule processing. All rules in a single group share a configured evaluation interval. All rules in the group will be processed together on this interval, sequentially, and all rules will be processed. It's common to group related alerting rules into a single AlertingRule resources, and within that resource, closely related alerts, or simply alerts with the same interval, into individual groups. You are also free to create AlertingRule resources with only a single rule group, but be aware that this can have a performance impact on Prometheus if the group is extremely large or has very complex query expressions to evaluate. Spreading very complex rules across multiple groups to allow them to be processed in parallel is also a common use-case.
groups[]	object	RuleGroup is a list of sequentially evaluated alerting rules.

5.1.2. .spec.groups

Description

groups is a list of grouped alerting rules. Rule groups are the unit at which Prometheus parallelizes rule processing. All rules in a single group share a configured evaluation interval. All rules in the group will be processed together on this interval, sequentially, and all rules will be processed.

It's common to group related alerting rules into a single AlertingRule resources, and within that resource, closely related alerts, or simply alerts with the same interval, into individual groups. You are also free to create AlertingRule resources with only a single rule group, but be aware that this can have a performance impact on Prometheus if the group is extremely large or has very complex query expressions to evaluate. Spreading very complex rules across multiple groups to allow them to be processed in parallel is also a common use-case.

Type

array

5.1.3. .spec.groups[]

Description

RuleGroup is a list of sequentially evaluated alerting rules.

Type

object

Required

- **name**
- **rules**

Property	Type	Description
interval	string	interval is how often rules in the group are evaluated. If not specified, it defaults to the <code>global.evaluation_interval</code> configured in Prometheus, which itself defaults to 30 seconds. You can check if this value has been modified from the default on your cluster by inspecting the platform Prometheus configuration: The relevant field in that resource is: <code>spec.evaluationInterval</code>
name	string	name is the name of the group.
rules	array	rules is a list of sequentially evaluated alerting rules. Prometheus may process rule groups in parallel, but rules within a single group are always processed sequentially, and all rules are processed.
rules[]	object	Rule describes an alerting rule. See Prometheus documentation: - https://www.prometheus.io/docs/prometheus/latest/configuration/alerting_rules

5.1.4. .spec.groups[].rules

Description

rules is a list of sequentially evaluated alerting rules. Prometheus may process rule groups in parallel, but rules within a single group are always processed sequentially, and all rules are processed.

Type

array

5.1.5. .spec.groups[].rules[]

Description

Rule describes an alerting rule. See Prometheus documentation: -

https://www.prometheus.io/docs/prometheus/latest/configuration/alerting_rules

Type

object

Required

- **alert**
- **expr**

Property	Type	Description
alert	string	alert is the name of the alert. Must be a valid label value, i.e. may contain any Unicode character.
annotations	object (string)	annotations to add to each alert. These are values that can be used to store longer additional information that you won't query on, such as alert descriptions or runbook links.
expr	integer-or-string	expr is the PromQL expression to evaluate. Every evaluation cycle this is evaluated at the current time, and all resultant time series become pending or firing alerts. This is most often a string representing a PromQL expression, e.g.: mapi_current_pending_csr > mapi_max_pending_csr In rare cases this could be a simple integer, e.g. a simple "1" if the intent is to create an alert that is always firing. This is sometimes used to create an always-firing "Watchdog" alert in order to ensure the alerting pipeline is functional.

Property	Type	Description
for	string	for is the time period after which alerts are considered firing after first returning results. Alerts which have not yet fired for long enough are considered pending.
labels	object (string)	labels to add or overwrite for each alert. The results of the PromQL expression for the alert will result in an existing set of labels for the alert, after evaluating the expression, for any label specified here with the same name as a label in that set, the label here wins and overwrites the previous value. These should typically be short identifying values that may be useful to query against. A common example is the alert severity, where one sets severity: warning under the labels key:

5.1.6. .status

Description

status describes the current state of this AlertOverrides object.

Type

object

Property	Type	Description
observedGeneration	integer	observedGeneration is the last generation change you've dealt with.
prometheusRule	object	prometheusRule is the generated PrometheusRule for this AlertingRule. Each AlertingRule instance results in a generated PrometheusRule object in the same namespace, which is always the openshift-monitoring namespace.

5.1.7. .status.prometheusRule

Description

prometheusRule is the generated PrometheusRule for this AlertingRule. Each AlertingRule instance results in a generated PrometheusRule object in the same namespace, which is always the openshift-monitoring namespace.

Type

object

Required

- **name**

Property	Type	Description
name	string	name of the referenced PrometheusRule.

5.2. API ENDPOINTS

The following API endpoints are available:

- **/apis/monitoring.openshift.io/v1/alertingrules**
 - **GET**: list objects of kind AlertingRule
- **/apis/monitoring.openshift.io/v1/namespaces/{namespace}/alertingrules**
 - **DELETE**: delete collection of AlertingRule
 - **GET**: list objects of kind AlertingRule
 - **POST**: create an AlertingRule
- **/apis/monitoring.openshift.io/v1/namespaces/{namespace}/alertingrules/{name}**
 - **DELETE**: delete an AlertingRule
 - **GET**: read the specified AlertingRule
 - **PATCH**: partially update the specified AlertingRule
 - **PUT**: replace the specified AlertingRule
- **/apis/monitoring.openshift.io/v1/namespaces/{namespace}/alertingrules/{name}/status**
 - **GET**: read status of the specified AlertingRule
 - **PATCH**: partially update status of the specified AlertingRule
 - **PUT**: replace status of the specified AlertingRule

5.2.1. /apis/monitoring.openshift.io/v1/alertingrules

HTTP method

GET

Description

list objects of kind AlertingRule

Table 5.1. HTTP responses

HTTP code	Reponse body
200 - OK	AlertingRuleList schema
401 - Unauthorized	Empty

5.2.2. /apis/monitoring.openshift.io/v1/namespaces/{namespace}/alertingrules**HTTP method****DELETE****Description**

delete collection of AlertingRule

Table 5.2. HTTP responses

HTTP code	Reponse body
200 - OK	Status schema
401 - Unauthorized	Empty

HTTP method**GET****Description**

list objects of kind AlertingRule

Table 5.3. HTTP responses

HTTP code	Reponse body
200 - OK	AlertingRuleList schema
401 - Unauthorized	Empty

HTTP method**POST****Description**

create an AlertingRule

Table 5.4. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 5.5. Body parameters

Parameter	Type	Description
body	AlertingRule schema	

Table 5.6. HTTP responses

HTTP code	Response body
200 - OK	AlertingRule schema
201 - Created	AlertingRule schema
202 - Accepted	AlertingRule schema
401 - Unauthorized	Empty

5.2.3. /apis/monitoring.openshift.io/v1/namespaces/{namespace}/alertingrules/{name}

Table 5.7. Global path parameters

Parameter	Type	Description
name	string	name of the AlertingRule

HTTP method**DELETE****Description**

delete an AlertingRule

Table 5.8. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Table 5.9. HTTP responses

HTTP code	Reponse body
200 - OK	Status schema
202 - Accepted	Status schema
401 - Unauthorized	Empty

HTTP method**GET****Description**

read the specified AlertingRule

Table 5.10. HTTP responses

HTTP code	Reponse body
200 - OK	AlertingRule schema
401 - Unauthorized	Empty

HTTP method**PATCH****Description**

partially update the specified AlertingRule

Table 5.11. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 5.12. HTTP responses

HTTP code	Response body
200 - OK	AlertingRule schema
401 - Unauthorized	Empty

HTTP method

PUT

Description

replace the specified AlertingRule

Table 5.13. Query parameters

Parameter	Type	Description

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 5.14. Body parameters

Parameter	Type	Description
body	AlertingRule schema	

Table 5.15. HTTP responses

HTTP code	Reponse body
200 - OK	AlertingRule schema
201 - Created	AlertingRule schema
401 - Unauthorized	Empty

5.2.4. /apis/monitoring.openshift.io/v1/namespaces/{namespace}/alertingrules/{name}

Table 5.16. Global path parameters

Parameter	Type	Description
name	string	name of the AlertingRule

HTTP method**GET****Description**

read status of the specified AlertingRule

Table 5.17. HTTP responses

HTTP code	Reponse body
200 - OK	AlertingRule schema
401 - Unauthorized	Empty

HTTP method**PATCH****Description**

partially update status of the specified AlertingRule

Table 5.18. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Parameter	Type	Description
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 5.19. HTTP responses

HTTP code	Response body
200 - OK	AlertingRule schema
401 - Unauthorized	Empty

HTTP method**PUT****Description**

replace status of the specified AlertingRule

Table 5.20. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Parameter	Type	Description
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 5.21. Body parameters

Parameter	Type	Description
body	AlertingRule schema	

Table 5.22. HTTP responses

HTTP code	Response body
200 - OK	AlertingRule schema
201 - Created	AlertingRule schema
401 - Unauthorized	Empty

CHAPTER 6. PODMONITOR [MONITORING.COREOS.COM/V1]

Description

The **PodMonitor** custom resource definition (CRD) defines how **Prometheus** and **PrometheusAgent** can scrape metrics from a group of pods. Among other things, it allows to specify:

- * The pods to scrape via label selectors.
- * The container ports to scrape.
- * Authentication credentials to use.
- * Target and metric relabeling.

Prometheus and **PrometheusAgent** objects select **PodMonitor** objects using label and namespace selectors.

Type

object

Required

- **spec**

6.1. SPECIFICATION

Property	Type	Description
apiVersion	string	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	string	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	ObjectMeta	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Property	Type	Description
spec	object	Specification of desired Pod selection for target discovery by Prometheus.

6.1.1. .spec

Description

Specification of desired Pod selection for target discovery by Prometheus.

Type

object

Required

- **selector**

Property	Type	Description
attachMetadata	object	attachMetadata defines additional metadata which is added to the discovered targets. It requires Prometheus >= v2.35.0.
bodySizeLimit	string	When defined, bodySizeLimit specifies a job level limit on the size of uncompressed response body that will be accepted by Prometheus. It requires Prometheus >= v2.28.0.
convertClassicHistogramsToNHCB	boolean	Whether to convert all scraped classic histograms into a native histogram with custom buckets. It requires Prometheus >= v3.0.0.
fallbackScrapeProtocol	string	The protocol to use if a scrape returns blank, unparseable, or otherwise invalid Content-Type. It requires Prometheus >= v3.0.0.

Property	Type	Description
jobLabel	string	The label to use to retrieve the job name from. jobLabel selects the label from the associated Kubernetes Pod object which will be used as the job label for all metrics. For example if jobLabel is set to foo and the Kubernetes Pod object is labeled with foo: bar, then Prometheus adds the job="bar" label to all ingested metrics. If the value of this field is empty, the job label of the metrics defaults to the namespace and name of the PodMonitor object (e.g. <namespace>/<name>).
keepDroppedTargets	integer	Per-scrape limit on the number of targets dropped by relabeling that will be kept in memory. 0 means no limit. It requires Prometheus $\geq$ v2.47.0.
labelLimit	integer	Per-scrape limit on number of labels that will be accepted for a sample. It requires Prometheus $\geq$ v2.27.0.
labelNameLengthLimit	integer	Per-scrape limit on length of labels name that will be accepted for a sample. It requires Prometheus $\geq$ v2.27.0.
labelValueLengthLimit	integer	Per-scrape limit on length of labels value that will be accepted for a sample. It requires Prometheus $\geq$ v2.27.0.

Property	Type	Description
namespaceSelector	object	namespaceSelector defines in which namespace(s) Prometheus should discover the pods. By default, the pods are discovered in the same namespace as the PodMonitor object but it is possible to select pods across different/all namespaces.
nativeHistogramBucketLimit	integer	If there are more than this many buckets in a native histogram, buckets will be merged to stay within the limit. It requires Prometheus $\geq$ v2.45.0.
nativeHistogramMinBucketFactor	integer-or-string	If the growth factor of one bucket to the next is smaller than this, buckets will be merged to increase the factor sufficiently. It requires Prometheus $\geq$ v2.50.0.
podMetricsEndpoints	array	Defines how to scrape metrics from the selected pods.
podMetricsEndpoints[]	object	PodMetricsEndpoint defines an endpoint serving Prometheus metrics to be scraped by Prometheus.
podTargetLabels	array (string)	podTargetLabels defines the labels which are transferred from the associated Kubernetes Pod object onto the ingested metrics.
sampleLimit	integer	sampleLimit defines a per-scrape limit on the number of scraped samples that will be accepted.
scrapeClass	string	The scrape class to apply.

Property	Type	Description
scrapeClassicHistograms	boolean	Whether to scrape a classic histogram that is also exposed as a native histogram. It requires Prometheus $\geq$ v2.45.0. Notice: scrapeClassicHistograms corresponds to the always_scrape_classic_histograms field in the Prometheus configuration.
scrapeProtocols	array (string)	scrapeProtocols defines the protocols to negotiate during a scrape. It tells clients the protocols supported by Prometheus in order of preference (from most to least preferred). If unset, Prometheus uses its default value. It requires Prometheus $\geq$ v2.49.0.
selector	object	Label selector to select the Kubernetes Pod objects to scrape metrics from.
selectorMechanism	string	Mechanism used to select the endpoints to scrape. By default, the selection process relies on relabel configurations to filter the discovered targets. Alternatively, you can opt in for role selectors, which may offer better efficiency in large clusters. Which strategy is best for your use case needs to be carefully evaluated. It requires Prometheus $\geq$ v2.17.0.
targetLimit	integer	targetLimit defines a limit on the number of scraped targets that will be accepted.

6.1.2. .spec.attachMetadata

Description

attachMetadata defines additional metadata which is added to the discovered targets. It requires Prometheus >= v2.35.0.

Type

object

Property	Type	Description
node	boolean	When set to true, Prometheus attaches node metadata to the discovered targets. The Prometheus service account must have the list and watch permissions on the Nodes objects.

6.1.3. .spec.namespaceSelector

Description

namespaceSelector defines in which namespace(s) Prometheus should discover the pods. By default, the pods are discovered in the same namespace as the **PodMonitor** object but it is possible to select pods across different/all namespaces.

Type

object

Property	Type	Description
any	boolean	Boolean describing whether all namespaces are selected in contrast to a list restricting them.
matchNames	array (string)	List of namespace names to select from.

6.1.4. .spec.podMetricsEndpoints

Description

Defines how to scrape metrics from the selected pods.

Type

array

6.1.5. .spec.podMetricsEndpoints[]

Description

PodMetricsEndpoint defines an endpoint serving Prometheus metrics to be scraped by Prometheus.

Type
object

Property	Type	Description
authorization	object	authorization configures the Authorization header credentials to use when scraping the target. Cannot be set at the same time as basicAuth, or oauth2.
basicAuth	object	basicAuth configures the Basic Authentication credentials to use when scraping the target. Cannot be set at the same time as authorization, or oauth2.
bearerTokenSecret	object	bearerTokenSecret specifies a key of a Secret containing the bearer token for scraping targets. The secret needs to be in the same namespace as the PodMonitor object and readable by the Prometheus Operator. Deprecated: use authorization instead.
enableHttp2	boolean	enableHttp2 can be used to disable HTTP2 when scraping the target.
filterRunning	boolean	When true, the pods which are not running (e.g. either in Failed or Succeeded state) are dropped during the target discovery. If unset, the filtering is enabled. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#pod-phase
followRedirects	boolean	followRedirects defines whether the scrape requests should follow HTTP 3xx redirects.

Property	Type	Description
honorLabels	boolean	When true, honorLabels preserves the metric's labels when they collide with the target's labels.
honorTimestamps	boolean	honorTimestamps controls whether Prometheus preserves the timestamps when exposed by the target.
interval	string	Interval at which Prometheus scrapes the metrics from the target. If empty, Prometheus uses the global scrape interval.
metricRelabelings	array	metricRelabelings configures the relabeling rules to apply to the samples before ingestion.
metricRelabelings[]	object	RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
oauth2	object	oauth2 configures the OAuth2 settings to use when scraping the target. It requires Prometheus >= 2.27.0. Cannot be set at the same time as authorization , or basicAuth .

Property	Type	Description
params	object	params define optional HTTP URL parameters.
params{}	array (string)	
path	string	HTTP path from which to scrape for metrics. If empty, Prometheus uses the default value (e.g. /metrics).
port	string	The Pod port name which exposes the endpoint. It takes precedence over the portNumber and targetPort fields.
portNumber	integer	The Pod port number which exposes the endpoint.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{[]}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.

Property	Type	Description
relabelings	array	relabelings configures the relabeling rules to apply the target's metadata labels. The Operator automatically adds relabelings for a few standard Kubernetes fields. The original scrape job's name is available via the <code>_tmp_prometheus_job_name</code> label. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config
relabelings[]	object	RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config
scheme	string	HTTP scheme to use for scraping. http and https are the expected values unless you rewrite the <i>scheme</i> label via relabeling. If empty, Prometheus uses the default value http.
scrapeTimeout	string	Timeout after which Prometheus considers the scrape to be failed. If empty, Prometheus uses the global scrape timeout unless it is less than the target's scrape interval value in which the latter is used. The value cannot be greater than the scrape interval otherwise the operator will reject the resource.

Property	Type	Description
targetPort	integer-or-string	Name or number of the target port of the Pod object behind the Service, the port must be specified with container port property. Deprecated: use 'port' or 'portNumber' instead.
tlsConfig	object	TLS configuration to use when scraping the target.
trackTimestampsStaleness	boolean	trackTimestampsStaleness defines whether Prometheus tracks staleness of the metrics that have an explicit timestamp present in scraped data. Has no effect if honorTimestamps is false. It requires Prometheus >= v2.48.0.

6.1.6. .spec.podMetricsEndpoints[].authorization

Description

authorization configures the Authorization header credentials to use when scraping the target. Cannot be set at the same time as **basicAuth**, or **oauth2**.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

6.1.7. .spec.podMetricsEndpoints[].authorization.credentials

Description

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

6.1.8. .spec.podMetricsEndpoints[].basicAuth

Description

basicAuth configures the Basic Authentication credentials to use when scraping the target. Cannot be set at the same time as **authorization**, or **oauth2**.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

6.1.9. .spec.podMetricsEndpoints[].basicAuth.password

Description

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

6.1.10. .spec.podMetricsEndpoints[].basicAuth.username

Description

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

6.1.11. .spec.podMetricsEndpoints[].bearerTokenSecret

Description

bearerTokenSecret specifies a key of a Secret containing the bearer token for scraping targets. The secret needs to be in the same namespace as the PodMonitor object and readable by the Prometheus Operator.

Deprecated: use **authorization** instead.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

6.1.12. .spec.podMetricsEndpoints[].metricRelabelings

Description

metricRelabelings configures the relabeling rules to apply to the samples before ingestion.

Type

array

6.1.13. .spec.podMetricsEndpoints[].metricRelabelings[]**Description**

RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples.

More info:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

object

Property	Type	Description
action	string	Action to perform based on the regex matching. Uppercase and Lowercase actions require Prometheus >= v2.36.0. DropEqual and KeepEqual actions require Prometheus >= v2.41.0. Default: "Replace"
modulus	integer	Modulus to take of the hash of the source label values. Only applicable when the action is HashMod .
regex	string	Regular expression against which the extracted value is matched.
replacement	string	Replacement value against which a Replace action is performed if the regular expression matches. Regex capture groups are available.
separator	string	Separator is the string between concatenated SourceLabels.

Property	Type	Description
sourceLabels	array (string)	The source labels select values from existing labels. Their content is concatenated using the configured Separator and matched against the configured regular expression.
targetLabel	string	Label to which the resulting string is written in a replacement. It is mandatory for Replace, HashMod, Lowercase, Uppercase, KeepEqual and DropEqual actions. Regex capture groups are available.

6.1.14. .spec.podMetricsEndpoints[].oauth2

Description

oauth2 configures the OAuth2 settings to use when scraping the target. It requires Prometheus >= 2.27.0.

Cannot be set at the same time as **authorization**, or **basicAuth**.

Type

object

Required

- **clientId**
- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Property	Type	Description
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.

Property	Type	Description
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

6.1.15. .spec.podMetricsEndpoints[].oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

6.1.16. .spec.podMetricsEndpoints[].oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

6.1.17. .spec.podMetricsEndpoints[].oauth2.clientId.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

6.1.18. .spec.podMetricsEndpoints[].oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

6.1.19. .spec.podMetricsEndpoints[].oauth2.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

6.1.20. .spec.podMetricsEndpoints[].oauth2.proxyConnectHeader{}

Description

Type

array

6.1.21. .spec.podMetricsEndpoints[].oauth2.proxyConnectHeader{}[]

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

6.1.22. .spec.podMetricsEndpoints[].oauth2.tlsConfig

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.

Property	Type	Description
serverName	string	Used to verify the hostname for the targets.

6.1.23. .spec.podMetricsEndpoints[].oauth2.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

6.1.24. .spec.podMetricsEndpoints[].oauth2.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

6.1.25. .spec.podMetricsEndpoints[].oauth2.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

6.1.26. .spec.podMetricsEndpoints[].oauth2.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

6.1.27. .spec.podMetricsEndpoints[].oauth2.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

6.1.28. .spec.podMetricsEndpoints[].oauth2.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

6.1.29. .spec.podMetricsEndpoints[].oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

6.1.30. .spec.podMetricsEndpoints[].params

Description

params define optional HTTP URL parameters.

Type

object

6.1.31. .spec.podMetricsEndpoints[].proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type
object

6.1.32. .spec.podMetricsEndpoints[].proxyConnectHeader{}

Description

Type
array

6.1.33. .spec.podMetricsEndpoints[].proxyConnectHeader{}[]

Description

SecretKeySelector selects a key of a Secret.

Type
object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

6.1.34. .spec.podMetricsEndpoints[].relabelings

Description

relabelings configures the relabeling rules to apply the target's metadata labels. The Operator automatically adds relabelings for a few standard Kubernetes fields.

The original scrape job's name is available via the `\__tmp_prometheus_job_name` label.

More info:
https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

array

6.1.35. .spec.podMetricsEndpoints[].relabelings[]

Description

RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples.

More info:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

object

Property	Type	Description
action	string	Action to perform based on the regex matching. Uppercase and Lowercase actions require Prometheus >= v2.36.0. DropEqual and KeepEqual actions require Prometheus >= v2.41.0. Default: "Replace"
modulus	integer	Modulus to take of the hash of the source label values. Only applicable when the action is HashMod .
regex	string	Regular expression against which the extracted value is matched.
replacement	string	Replacement value against which a Replace action is performed if the regular expression matches. Regex capture groups are available.
separator	string	Separator is the string between concatenated SourceLabels.

Property	Type	Description
sourceLabels	array (string)	The source labels select values from existing labels. Their content is concatenated using the configured Separator and matched against the configured regular expression.
targetLabel	string	Label to which the resulting string is written in a replacement. It is mandatory for Replace, HashMod, Lowercase, Uppercase, KeepEqual and DropEqual actions. Regex capture groups are available.

6.1.36. .spec.podMetricsEndpoints[].tlsConfig

Description

TLS configuration to use when scraping the target.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.

Property	Type	Description
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

6.1.37. .spec.podMetricsEndpoints[].tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

6.1.38. .spec.podMetricsEndpoints[].tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

6.1.39. .spec.podMetricsEndpoints[].tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

6.1.40. .spec.podMetricsEndpoints[].tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

6.1.41. .spec.podMetricsEndpoints[].tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

6.1.42. .spec.podMetricsEndpoints[].tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

6.1.43. .spec.podMetricsEndpoints[].tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

6.1.44. .spec.selector

Description

Label selector to select the Kubernetes **Pod** objects to scrape metrics from.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

6.1.45. .spec.selector.matchExpressions**Description**

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

6.1.46. .spec.selector.matchExpressions[]**Description**

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

6.2. API ENDPOINTS

The following API endpoints are available:

- **/apis/monitoring.coreos.com/v1/podmonitors**
 - **GET**: list objects of kind PodMonitor
- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/podmonitors**
 - **DELETE**: delete collection of PodMonitor
 - **GET**: list objects of kind PodMonitor
 - **POST**: create a PodMonitor
- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/podmonitors/{name}**
 - **DELETE**: delete a PodMonitor
 - **GET**: read the specified PodMonitor
 - **PATCH**: partially update the specified PodMonitor
 - **PUT**: replace the specified PodMonitor

6.2.1. /apis/monitoring.coreos.com/v1/podmonitors

HTTP method

GET

Description

list objects of kind PodMonitor

Table 6.1. HTTP responses

HTTP code	Reponse body
200 - OK	PodMonitorList schema
401 - Unauthorized	Empty

6.2.2. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/podmonitors

HTTP method

DELETE

Description

delete collection of PodMonitor

Table 6.2. HTTP responses

HTTP code	Reponse body
200 - OK	Status schema
401 - Unauthorized	Empty

HTTP method

GET

Description

list objects of kind PodMonitor

Table 6.3. HTTP responses

HTTP code	Reponse body
200 - OK	PodMonitorList schema
401 - Unauthorized	Empty

HTTP method

POST

Description

create a PodMonitor

Table 6.4. Query parameters

Parameter	Type	Description

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 6.5. Body parameters

Parameter	Type	Description
body	PodMonitor schema	

Table 6.6. HTTP responses

HTTP code	Reponse body
200 - OK	PodMonitor schema
201 - Created	PodMonitor schema
202 - Accepted	PodMonitor schema
401 - Unauthorized	Empty

6.2.3. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/podmonitors/{nam

Table 6.7. Global path parameters

Parameter	Type	Description
name	string	name of the PodMonitor

HTTP method

DELETE

Description

delete a PodMonitor

Table 6.8. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Table 6.9. HTTP responses

HTTP code	Response body
200 - OK	Status schema
202 - Accepted	Status schema
401 - Unauthorized	Empty

HTTP method

GET

Description

read the specified PodMonitor

Table 6.10. HTTP responses

HTTP code	Response body
200 - OK	PodMonitor schema
401 - Unauthorized	Empty

HTTP method

PATCH

Description

partially update the specified PodMonitor

Table 6.11. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 6.12. HTTP responses

HTTP code	Response body
200 - OK	PodMonitor schema
401 - Unauthorized	Empty

HTTP method**PUT****Description**

replace the specified PodMonitor

Table 6.13. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 6.14. Body parameters

Parameter	Type	Description
body	PodMonitor schema	

Table 6.15. HTTP responses

HTTP code	Reponse body
200 - OK	PodMonitor schema
201 - Created	PodMonitor schema
401 - Unauthorized	Empty

CHAPTER 7. PROBE [MONITORING.COREOS.COM/V1]

Description

The **Probe** custom resource definition (CRD) defines how to scrape metrics from prober exporters such as the [blackbox exporter](https://github.com/prometheus/blackbox_exporter).

The **Probe** resource needs 2 pieces of information: * The list of probed addresses which can be defined statically or by discovering Kubernetes Ingress objects. * The prober which exposes the availability of probed endpoints (over various protocols such HTTP, TCP, ICMP, ...) as Prometheus metrics.

Prometheus and **PrometheusAgent** objects select **Probe** objects using label and namespace selectors.

Type

object

Required

- **spec**

7.1. SPECIFICATION

Property	Type	Description
apiVersion	string	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	string	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds

Property	Type	Description
metadata	ObjectMeta	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	object	Specification of desired Ingress selection for target discovery by Prometheus.

7.1.1. .spec

Description

Specification of desired Ingress selection for target discovery by Prometheus.

Type

object

Property	Type	Description
authorization	object	Authorization section for this endpoint
basicAuth	object	BasicAuth allow an endpoint to authenticate over basic authentication. More info: https://prometheus.io/docs/operating/configuration/#endpoint
bearerTokenSecret	object	Secret to mount to read bearer token for scraping targets. The secret needs to be in the same namespace as the probe and accessible by the Prometheus Operator.
convertClassicHistogramsToNHCB	boolean	Whether to convert all scraped classic histograms into a native histogram with custom buckets. It requires Prometheus >= v3.0.0.
fallbackScrapeProtocol	string	The protocol to use if a scrape returns blank, unparseable, or otherwise invalid Content-Type. It requires Prometheus >= v3.0.0.

Property	Type	Description
interval	string	Interval at which targets are probed using the configured prober. If not specified Prometheus' global scrape interval is used.
jobName	string	The job name assigned to scraped metrics by default.
keepDroppedTargets	integer	Per-scrape limit on the number of targets dropped by relabeling that will be kept in memory. 0 means no limit. It requires Prometheus >= v2.47.0.
labelLimit	integer	Per-scrape limit on number of labels that will be accepted for a sample. Only valid in Prometheus versions 2.27.0 and newer.
labelNameLengthLimit	integer	Per-scrape limit on length of labels name that will be accepted for a sample. Only valid in Prometheus versions 2.27.0 and newer.
labelValueLengthLimit	integer	Per-scrape limit on length of labels value that will be accepted for a sample. Only valid in Prometheus versions 2.27.0 and newer.
metricRelabelings	array	MetricRelabelConfigs to apply to samples before ingestion.
metricRelabelings[]	object	RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Property	Type	Description
module	string	The module to use for probing specifying how to probe the target. Example module configuring in the blackbox exporter: https://github.com/prometheus/blackbox_exporter/blob/master/example.yml
nativeHistogramBucketLimit	integer	If there are more than this many buckets in a native histogram, buckets will be merged to stay within the limit. It requires Prometheus >= v2.45.0.
nativeHistogramMinBucketFactor	integer-or-string	If the growth factor of one bucket to the next is smaller than this, buckets will be merged to increase the factor sufficiently. It requires Prometheus >= v2.50.0.
oauth2	object	OAuth2 for the URL. Only valid in Prometheus versions 2.27.0 and newer.
params	array	The list of HTTP query parameters for the scrape. Please note that the .spec.module field takes precedence over the module parameter from this list when both are defined. The module name must be added using Module under ProbeSpec.
params[]	object	ProbeParam defines specification of extra parameters for a Probe.
prober	object	Specification for the prober to use for probing targets. The prober.URL parameter is required. Targets cannot be probed if left empty.
sampleLimit	integer	SampleLimit defines per-scrape limit on number of scraped samples that will be accepted.
scrapeClass	string	The scrape class to apply.

Property	Type	Description
scrapeClassicHistograms	boolean	Whether to scrape a classic histogram that is also exposed as a native histogram. It requires Prometheus $\geq$ v2.45.0. Notice: scrapeClassicHistograms corresponds to the always_scrape_classic_histograms field in the Prometheus configuration.
scrapeProtocols	array (string)	scrapeProtocols defines the protocols to negotiate during a scrape. It tells clients the protocols supported by Prometheus in order of preference (from most to least preferred). If unset, Prometheus uses its default value. It requires Prometheus $\geq$ v2.49.0.
scrapeTimeout	string	Timeout for scraping metrics from the Prometheus exporter. If not specified, the Prometheus global scrape timeout is used. The value cannot be greater than the scrape interval otherwise the operator will reject the resource.
targetLimit	integer	TargetLimit defines a limit on the number of scraped targets that will be accepted.
targets	object	Targets defines a set of static or dynamically discovered targets to probe.
tlsConfig	object	TLS configuration to use when scraping the endpoint.

7.1.2. .spec.authorization

Description

Authorization section for this endpoint

Type
object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

7.1.3. .spec.authorization.credentials

Description

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type
object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

7.1.4. .spec.basicAuth

Description

BasicAuth allow an endpoint to authenticate over basic authentication. More info:
<https://prometheus.io/docs/operating/configuration/#endpoint>

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

7.1.5. .spec.basicAuth.password

Description

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

7.1.6. .spec.basicAuth.username

Description

username specifies a key of a Secret containing the username for authentication.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

7.1.7. .spec.bearerTokenSecret

Description

Secret to mount to read bearer token for scraping targets. The secret needs to be in the same namespace as the probe and accessible by the Prometheus Operator.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

7.1.8. .spec.metricRelabelings

Description

MetricRelabelConfigs to apply to samples before ingestion.

Type

array

7.1.9. .spec.metricRelabelings[]

Description

RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples.

More info:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

object

Property	Type	Description
action	string	Action to perform based on the regex matching. Uppercase and Lowercase actions require Prometheus >= v2.36.0. DropEqual and KeepEqual actions require Prometheus >= v2.41.0. Default: "Replace"

Property	Type	Description
modulus	integer	Modulus to take of the hash of the source label values. Only applicable when the action is HashMod.
regex	string	Regular expression against which the extracted value is matched.
replacement	string	Replacement value against which a Replace action is performed if the regular expression matches. Regex capture groups are available.
separator	string	Separator is the string between concatenated SourceLabels.
sourceLabels	array (string)	The source labels select values from existing labels. Their content is concatenated using the configured Separator and matched against the configured regular expression.
targetLabel	string	Label to which the resulting string is written in a replacement. It is mandatory for Replace, HashMod, Lowercase, Uppercase, KeepEqual and DropEqual actions. Regex capture groups are available.

7.1.10. .spec.oauth2

Description

OAuth2 for the URL. Only valid in Prometheus versions 2.27.0 and newer.

Type

object

Required

- **clientId**

- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}}[]	object	SecretKeySelector selects a key of a Secret.

Property	Type	Description
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

7.1.11. .spec.oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

7.1.12. .spec.oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

7.1.13. .spec.oauth2.clientId.secret**Description**

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

7.1.14. .spec.oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

7.1.15. .spec.oauth2.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

7.1.16. .spec.oauth2.proxyConnectHeader{}

Description

Type

array

7.1.17. .spec.oauth2.proxyConnectHeader{[]}[]

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

7.1.18. .spec.oauth2.tlsConfig

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.

Property	Type	Description
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

7.1.19. .spec.oauth2.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

7.1.20. .spec.oauth2.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

7.1.21. .spec.oauth2.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

7.1.22. .spec.oauth2.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

7.1.23. .spec.oauth2.tlsConfig.cert.configMap**Description**

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

7.1.24. .spec.oauth2.tlsConfig.cert.secret**Description**

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

7.1.25. .spec.oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

7.1.26. .spec.params

Description

The list of HTTP query parameters for the scrape. Please note that the **.spec.module** field takes precedence over the **module** parameter from this list when both are defined. The module name must be added using Module under ProbeSpec.

Type

array

7.1.27. .spec.params[]

Description

ProbeParam defines specification of extra parameters for a Probe.

Type

object

Required

- **name**

Property	Type	Description
name	string	The parameter name
values	array (string)	The parameter values

7.1.28. .spec.prober

Description

Specification for the prober to use for probing targets. The prober.URL parameter is required. Targets cannot be probed if left empty.

Type

object

Required

- **url**

Property	Type	Description
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Property	Type	Description
path	string	Path to collect metrics from. Defaults to /probe .
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scheme	string	HTTP scheme to use for scraping. http and https are the expected values unless you rewrite the <i>scheme</i> label via relabeling. If empty, Prometheus uses the default value http .
url	string	Mandatory URL of the prober.

7.1.29. .spec.prober.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests.
It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

7.1.30. .spec.prober.proxyConnectHeader{}

Description

Type

array

7.1.31. .spec.prober.proxyConnectHeader{[]}[]

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

7.1.32. .spec.targets

Description

Targets defines a set of static or dynamically discovered targets to probe.

Type

object

Property	Type	Description

Property	Type	Description
ingress	object	ingress defines the Ingress objects to probe and the relabeling configuration. If staticConfig is also defined, staticConfig takes precedence.
staticConfig	object	staticConfig defines the static list of targets to probe and the relabeling configuration. If ingress is also defined, staticConfig takes precedence. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#static_config .

7.1.33. .spec.targets.ingress

Description

ingress defines the Ingress objects to probe and the relabeling configuration. If **staticConfig** is also defined, **staticConfig** takes precedence.

Type

object

Property	Type	Description
namespaceSelector	object	From which namespaces to select Ingress objects.
relabelingConfigs	array	RelabelConfigs to apply to the label set of the target before it gets scraped. The original ingress address is available via the __tmp_prometheus_ingress_address label. It can be used to customize the probed URL. The original scrape job's name is available via the __tmp_prometheus_job_name label. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Property	Type	Description
relabelingConfigs[]	object	RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config
selector	object	Selector to select the Ingress objects.

7.1.34. .spec.targets.ingress.namespaceSelector

Description

From which namespaces to select Ingress objects.

Type

object

Property	Type	Description
any	boolean	Boolean describing whether all namespaces are selected in contrast to a list restricting them.
matchNames	array (string)	List of namespace names to select from.

7.1.35. .spec.targets.ingress.relabelingConfigs

Description

RelabelConfigs to apply to the label set of the target before it gets scraped. The original ingress address is available via the **__tmp_prometheus_ingress_address** label. It can be used to customize the probed URL. The original scrape job's name is available via the **__tmp_prometheus_job_name** label. More info:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

array

7.1.36. .spec.targets.ingress.relabelingConfigs[]

Description

RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples.

More info:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

object

Property	Type	Description
action	string	Action to perform based on the regex matching. Uppercase and Lowercase actions require Prometheus >= v2.36.0. DropEqual and KeepEqual actions require Prometheus >= v2.41.0. Default: "Replace"
modulus	integer	Modulus to take of the hash of the source label values. Only applicable when the action is HashMod.
regex	string	Regular expression against which the extracted value is matched.
replacement	string	Replacement value against which a Replace action is performed if the regular expression matches. Regex capture groups are available.
separator	string	Separator is the string between concatenated SourceLabels.
sourceLabels	array (string)	The source labels select values from existing labels. Their content is concatenated using the configured Separator and matched against the configured regular expression.

Property	Type	Description
targetLabel	string	Label to which the resulting string is written in a replacement. It is mandatory for Replace, HashMod, Lowercase, Uppercase, KeepEqual and DropEqual actions. Regex capture groups are available.

7.1.37. .spec.targets.ingress.selector

Description

Selector to select the Ingress objects.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

7.1.38. .spec.targets.ingress.selector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

7.1.39. .spec.targets.ingress.selector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

7.1.40. .spec.targets.staticConfig

Description

staticConfig defines the static list of targets to probe and the relabeling configuration. If **ingress** is also defined, **staticConfig** takes precedence. More info:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#static_config.

Type

object

Property	Type	Description
labels	object (string)	Labels assigned to all metrics scraped from the targets.

Property	Type	Description
relabelingConfigs	array	RelabelConfigs to apply to the label set of the targets before it gets scraped. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config
relabelingConfigs[]	object	RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config
static	array (string)	The list of hosts to probe.

7.1.41. .spec.targets.staticConfig.relabelingConfigs

Description

RelabelConfigs to apply to the label set of the targets before it gets scraped. More info:
https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

array

7.1.42. .spec.targets.staticConfig.relabelingConfigs[]

Description

RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples.

More info:
https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

object

Property	Type	Description

Property	Type	Description
action	string	Action to perform based on the regex matching. Uppercase and Lowercase actions require Prometheus >= v2.36.0. DropEqual and KeepEqual actions require Prometheus >= v2.41.0. Default: "Replace"
modulus	integer	Modulus to take of the hash of the source label values. Only applicable when the action is HashMod.
regex	string	Regular expression against which the extracted value is matched.
replacement	string	Replacement value against which a Replace action is performed if the regular expression matches. Regex capture groups are available.
separator	string	Separator is the string between concatenated SourceLabels.
sourceLabels	array (string)	The source labels select values from existing labels. Their content is concatenated using the configured Separator and matched against the configured regular expression.
targetLabel	string	Label to which the resulting string is written in a replacement. It is mandatory for Replace, HashMod, Lowercase, Uppercase, KeepEqual and DropEqual actions. Regex capture groups are available.

7.1.43. .spec.tlsConfig

Description

TLS configuration to use when scraping the endpoint.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

7.1.44. .spec.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

7.1.45. .spec.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

7.1.46. .spec.tlsConfig.ca.secret**Description**

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

7.1.47. .spec.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

7.1.48. .spec.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

7.1.49. .spec.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

7.1.50. .spec.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

7.2. API ENDPOINTS

The following API endpoints are available:

- **/apis/monitoring.coreos.com/v1/probes**
 - **GET**: list objects of kind Probe
- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/probes**
 - **DELETE**: delete collection of Probe
 - **GET**: list objects of kind Probe
 - **POST**: create a Probe
- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/probes/{name}**
 - **DELETE**: delete a Probe
 - **GET**: read the specified Probe
 - **PATCH**: partially update the specified Probe
 - **PUT**: replace the specified Probe

7.2.1. /apis/monitoring.coreos.com/v1/probes

HTTP method**GET****Description**

list objects of kind Probe

Table 7.1. HTTP responses

HTTP code	Reponse body
200 - OK	ProbeList schema
401 - Unauthorized	Empty

7.2.2. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/probes**HTTP method****DELETE****Description**

delete collection of Probe

Table 7.2. HTTP responses

HTTP code	Reponse body
200 - OK	Status schema
401 - Unauthorized	Empty

HTTP method**GET****Description**

list objects of kind Probe

Table 7.3. HTTP responses

HTTP code	Reponse body
200 - OK	ProbeList schema
401 - Unauthorized	Empty

HTTP method**POST****Description**

create a Probe

Table 7.4. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 7.5. Body parameters

Parameter	Type	Description
body	Probe schema	

Table 7.6. HTTP responses

HTTP code	Response body
200 - OK	Probe schema
201 - Created	Probe schema
202 - Accepted	Probe schema
401 - Unauthorized	Empty

7.2.3. `/apis/monitoring.coreos.com/v1/namespaces/{namespace}/probes/{name}`

Table 7.7. Global path parameters

Parameter	Type	Description
name	string	name of the Probe

HTTP method

DELETE

Description

delete a Probe

Table 7.8. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Table 7.9. HTTP responses

HTTP code	Response body
200 - OK	Status schema
202 - Accepted	Status schema
401 - Unauthorized	Empty

HTTP method

GET

Description

read the specified Probe

Table 7.10. HTTP responses

HTTP code	Response body
200 - OK	Probe schema
401 - Unauthorized	Empty

HTTP method

PATCH

Description

partially update the specified Probe

Table 7.11. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 7.12. HTTP responses

HTTP code	Response body
200 - OK	Probe schema
401 - Unauthorized	Empty

HTTP method**PUT****Description**

replace the specified Probe

Table 7.13. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 7.14. Body parameters

Parameter	Type	Description
body	Probe schema	

Table 7.15. HTTP responses

HTTP code	Reponse body
200 - OK	Probe schema
201 - Created	Probe schema
401 - Unauthorized	Empty

CHAPTER 8. PROMETHEUS [MONITORING.COREOS.COM/V1]

Description

The **Prometheus** custom resource definition (CRD) defines a desired [Prometheus] (<https://prometheus.io/docs/prometheus>) setup to run in a Kubernetes cluster. It allows to specify many options such as the number of replicas, persistent storage, and Alertmanagers where firing alerts should be sent and many more.

For each **Prometheus** resource, the Operator deploys one or several **StatefulSet** objects in the same namespace. The number of StatefulSets is equal to the number of shards which is 1 by default.

The resource defines via label and namespace selectors which **ServiceMonitor**, **PodMonitor**, **Probe** and **PrometheusRule** objects should be associated to the deployed Prometheus instances.

The Operator continuously reconciles the scrape and rules configuration and a sidecar container running in the Prometheus pods triggers a reload of the configuration when needed.

Type

object

Required

- **spec**

8.1. SPECIFICATION

Property	Type	Description
apiVersion	string	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	string	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds

Property	Type	Description
metadata	ObjectMeta	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	object	Specification of the desired behavior of the Prometheus cluster. More info: https://github.com/kubernetes/community/blob/master/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	object	Most recent observed status of the Prometheus cluster. Read-only. More info: https://github.com/kubernetes/community/blob/master/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

8.1.1. .spec

Description

Specification of the desired behavior of the Prometheus cluster. More info:

<https://github.com/kubernetes/community/blob/master/contributors/devel/sig-architecture/api-conventions.md#spec-and-status>

Type

object

Property	Type	Description

Property	Type	Description
additionalAlertManagerConfigs	object	AdditionalAlertManagerConfigs specifies a key of a Secret containing additional Prometheus Alertmanager configurations. The Alertmanager configurations are appended to the configuration generated by the Prometheus Operator. They must be formatted according to the official Prometheus documentation: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#alertmanager_config The user is responsible for making sure that the configurations are valid Note that using this feature may expose the possibility to break upgrades of Prometheus. It is advised to review Prometheus release notes to ensure that no incompatible AlertManager configs are going to break Prometheus after the upgrade.

Property	Type	Description
additionalAlertRelabelConfigs	object	AdditionalAlertRelabelConfigs specifies a key of a Secret containing additional Prometheus alert relabel configurations. The alert relabel configurations are appended to the configuration generated by the Prometheus Operator. They must be formatted according to the official Prometheus documentation: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#alert_relabel_configs The user is responsible for making sure that the configurations are valid Note that using this feature may expose the possibility to break upgrades of Prometheus. It is advised to review Prometheus release notes to ensure that no incompatible alert relabel configs are going to break Prometheus after the upgrade.
additionalArgs	array	AdditionalArgs allows setting additional arguments for the 'prometheus' container. It is intended for e.g. activating hidden flags which are not supported by the dedicated configuration options yet. The arguments are passed as-is to the Prometheus container which may cause issues if they are invalid or not supported by the given Prometheus version. In case of an argument conflict (e.g. an argument which is already set by the operator itself) or when providing an invalid argument, the reconciliation will fail and an error will be logged.

Property	Type	Description
additionalArgs[]	object	Argument as part of the AdditionalArgs list.
additionalScrapeConfigs	object	AdditionalScrapeConfigs allows specifying a key of a Secret containing additional Prometheus scrape configurations. Scrape configurations specified are appended to the configurations generated by the Prometheus Operator. Job configurations specified must have the form as specified in the official Prometheus documentation: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#scrape_config . As scrape configs are appended, the user is responsible to make sure it is valid. Note that using this feature may expose the possibility to break upgrades of Prometheus. It is advised to review Prometheus release notes to ensure that no incompatible scrape configs are going to break Prometheus after the upgrade.
affinity	object	Defines the Pods' affinity scheduling rules if specified.
alerting	object	Defines the settings related to Alertmanager.
allowOverlappingBlocks	boolean	AllowOverlappingBlocks enables vertical compaction and vertical query merge in Prometheus. Deprecated: this flag has no effect for Prometheus $\geq$ 2.39.0 where overlapping blocks are enabled by default.

Property	Type	Description
apiserverConfig	object	APIServerConfig allows specifying a host and auth methods to access the Kubernetes API server. If null, Prometheus is assumed to run inside of the cluster: it will discover the API servers automatically and use the Pod's CA certificate and bearer token file at <code>/var/run/secrets/kubernetes.io/serviceaccount/</code> .
arbitraryFSAccessThroughSMs	object	When true, ServiceMonitor, PodMonitor and Probe object are forbidden to reference arbitrary files on the file system of the 'prometheus' container. When a ServiceMonitor's endpoint specifies a bearerTokenFile value (e.g. <code>/var/run/secrets/kubernetes.io/serviceaccount/token</code>), a malicious target can get access to the Prometheus service account's token in the Prometheus' scrape request. Setting spec.arbitraryFSAccessThroughSM to 'true' would prevent the attack. Users should instead provide the credentials using the spec.bearerTokenSecret field.
automountServiceAccountToken	boolean	AutomountServiceAccountToken indicates whether a service account token should be automatically mounted in the pod. If the field isn't set, the operator mounts the service account token by default. Warning: be aware that by default, Prometheus requires the service account token for Kubernetes service discovery. It is possible to use strategic merge patch to project the service account token into the 'prometheus' container.
baseImage	string	Deprecated: use 'spec.image' instead.

Property	Type	Description
bodySizeLimit	string	BodySizeLimit defines per-scrape on response body size. Only valid in Prometheus versions 2.45.0 and newer. Note that the global limit only applies to scrape objects that don't specify an explicit limit value. If you want to enforce a maximum limit for all scrape objects, refer to <code>enforcedBodySizeLimit</code>.
configMaps	array (string)	ConfigMaps is a list of ConfigMaps in the same namespace as the Prometheus object, which shall be mounted into the Prometheus Pods. Each ConfigMap is added to the StatefulSet definition as a volume named configmap-<code><configmap-name></code>. The ConfigMaps are mounted into <code>/etc/prometheus/configmaps/<code><configmap-name></code></code> in the 'prometheus' container.

Property	Type	Description
containers	array	Containers allows injecting additional containers or modifying operator generated containers. This can be used to allow adding an authentication proxy to the Pods or to change the behavior of an operator generated container. Containers described here modify an operator generated container if they share the same name and modifications are done via a strategic merge patch. The names of containers managed by the operator are: * prometheus * config-reloader * thanos-sidecar Overriding containers is entirely outside the scope of what the maintainers will support and by doing so, you accept that this behaviour may break at any time without notice.
containers[]	object	A single application container that you want to run within a pod.
convertClassicHistogramsToNHCB	boolean	Whether to convert all scraped classic histograms into a native histogram with custom buckets. It requires Prometheus >= v3.4.0.
disableCompaction	boolean	When true, the Prometheus compaction is disabled. When spec.thanos.objectStorageConfig or spec.objectStorageConfigFile are defined, the operator automatically disables block compaction to avoid race conditions during block uploads (as the Thanos documentation recommends).
dnsConfig	object	Defines the DNS configuration for the pods.

Property	Type	Description
dnsPolicy	string	Defines the DNS policy for the pods.
enableAdminAPI	boolean	Enables access to the Prometheus web admin API. WARNING: Enabling the admin APIs enables mutating endpoints, to delete data, shutdown Prometheus, and more. Enabling this should be done with care and the user is advised to add additional authentication authorization via a proxy to ensure only clients authorized to perform these actions can do so. For more information: https://prometheus.io/docs/prometheus/latest/querying/api/#tsdb-admin-apis
enableFeatures	array (string)	Enable access to Prometheus feature flags. By default, no features are enabled. Enabling features which are disabled by default is entirely outside the scope of what the maintainers will support and by doing so, you accept that this behaviour may break at any time without notice. For more information see https://prometheus.io/docs/prometheus/latest/feature_flags/
enableOTLPReceiver	boolean	Enable Prometheus to be used as a receiver for the OTLP Metrics protocol. Note that the OTLP receiver endpoint is automatically enabled if .spec.otlpConfig is defined. It requires Prometheus >= v2.47.0.

Property	Type	Description
enableRemoteWriteReceiver	boolean	Enable Prometheus to be used as a receiver for the Prometheus remote write protocol. WARNING: This is not considered an efficient way of ingesting samples. Use it with caution for specific low-volume use cases. It is not suitable for replacing the ingestion via scraping and turning Prometheus into a push-based metrics collection system. For more information see https://prometheus.io/docs/prometheus/latest/querying/api/#remote-write-receiver It requires Prometheus >= v2.33.0.
enableServiceLinks	boolean	Indicates whether information about services should be injected into pod's environment variables

Property	Type	Description
enforcedBodySizeLimit	string	When defined, enforcedBodySizeLimit specifies a global limit on the size of uncompressed response body that will be accepted by Prometheus. Targets responding with a body larger than this many bytes will cause the scrape to fail. It requires Prometheus $\geq$ v2.28.0. When both enforcedBodySizeLimit and bodySizeLimit are defined and greater than zero, the following rules apply: * Scrape objects without a defined bodySizeLimit value will inherit the global bodySizeLimit value (Prometheus $\geq$ 2.45.0) or the enforcedBodySizeLimit value (Prometheus $<$ v2.45.0). If Prometheus version is $\geq$ 2.45.0 and the enforcedBodySizeLimit is greater than the bodySizeLimit, the bodySizeLimit will be set to enforcedBodySizeLimit. * Scrape objects with a bodySizeLimit value less than or equal to enforcedBodySizeLimit keep their specific value. * Scrape objects with a bodySizeLimit value greater than enforcedBodySizeLimit are set to enforcedBodySizeLimit.

Property	Type	Description
enforcedKeepDroppedTargets	integer	When defined, enforcedKeepDroppedTargets specifies a global limit on the number of targets dropped by relabeling that will be kept in memory. The value overrides any spec.keepDroppedTargets set by ServiceMonitor, PodMonitor, Probe objects unless spec.keepDroppedTargets is greater than zero and less than spec.enforcedKeepDroppedTargets. It requires Prometheus >= v2.47.0. When both enforcedKeepDroppedTargets and keepDroppedTargets are defined and greater than zero, the following rules apply: * Scrape objects without a defined keepDroppedTargets value will inherit the global keepDroppedTargets value (Prometheus >= 2.45.0) or the enforcedKeepDroppedTargets value (Prometheus < v2.45.0). If Prometheus version is >= 2.45.0 and the enforcedKeepDroppedTargets is greater than the keepDroppedTargets, the keepDroppedTargets will be set to enforcedKeepDroppedTargets. * Scrape objects with a keepDroppedTargets value less than or equal to enforcedKeepDroppedTargets keep their specific value. * Scrape objects with a keepDroppedTargets value greater than enforcedKeepDroppedTargets are set to enforcedKeepDroppedTargets.

Property	Type	Description
enforcedLabelLimit	integer	When defined, enforcedLabelLimit specifies a global limit on the number of labels per sample. The value overrides any spec.labelLimit set by ServiceMonitor, PodMonitor, Probe objects unless spec.labelLimit is greater than zero and less than spec.enforcedLabelLimit. It requires Prometheus >= v2.27.0. When both enforcedLabelLimit and labelLimit are defined and greater than zero, the following rules apply: * Scrape objects without a defined labelLimit value will inherit the global labelLimit value (Prometheus >= 2.45.0) or the enforcedLabelLimit value (Prometheus < v2.45.0). If Prometheus version is >= 2.45.0 and the enforcedLabelLimit is greater than the labelLimit, the labelLimit will be set to enforcedLabelLimit. * Scrape objects with a labelLimit value less than or equal to enforcedLabelLimit keep their specific value. * Scrape objects with a labelLimit value greater than enforcedLabelLimit are set to enforcedLabelLimit.

Property	Type	Description
enforcedLabelNameLengthLimit	integer	When defined, enforcedLabelNameLengthLimit specifies a global limit on the length of labels name per sample. The value overrides any spec.labelNameLengthLimit set by ServiceMonitor, PodMonitor, Probe objects unless spec.labelNameLengthLimit is greater than zero and less than spec.enforcedLabelNameLengthLimit. It requires Prometheus $\geq$ v2.27.0. When both enforcedLabelNameLengthLimit and labelNameLengthLimit are defined and greater than zero, the following rules apply: * Scrape objects without a defined labelNameLengthLimit value will inherit the global labelNameLengthLimit value (Prometheus $\geq$ 2.45.0) or the enforcedLabelNameLengthLimit value (Prometheus $<$ v2.45.0). If Prometheus version is $\geq$ 2.45.0 and the enforcedLabelNameLengthLimit is greater than the labelNameLengthLimit, the labelNameLengthLimit will be set to enforcedLabelNameLengthLimit. * Scrape objects with a labelNameLengthLimit value less than or equal to enforcedLabelNameLengthLimit keep their specific value. * Scrape objects with a labelNameLengthLimit value greater than enforcedLabelNameLengthLimit are set to enforcedLabelNameLengthLimit.

Property	Type	Description
enforcedLabelValueLengthLimit	integer	When not null, enforcedLabelValueLengthLimit defines a global limit on the length of labels value per sample. The value overrides any spec.labelValueLengthLimit set by ServiceMonitor, PodMonitor, Probe objects unless spec.labelValueLengthLimit is greater than zero and less than spec.enforcedLabelValueLengthLimit. It requires Prometheus >= v2.27.0. When both enforcedLabelValueLengthLimit and labelValueLengthLimit are defined and greater than zero, the following rules apply: * Scrape objects without a defined labelValueLengthLimit value will inherit the global labelValueLengthLimit value (Prometheus >= 2.45.0) or the enforcedLabelValueLengthLimit value (Prometheus < v2.45.0). If Prometheus version is >= 2.45.0 and the enforcedLabelValueLengthLimit is greater than the labelValueLengthLimit, the labelValueLengthLimit will be set to enforcedLabelValueLengthLimit. * Scrape objects with a labelValueLengthLimit value less than or equal to enforcedLabelValueLengthLimit keep their specific value. * Scrape objects with a labelValueLengthLimit value greater than enforcedLabelValueLengthLimit are set to enforcedLabelValueLengthLimit.

Property	Type	Description
enforcedNamespaceLabel	string	When not empty, a label will be added to: 1. All metrics scraped from ServiceMonitor, PodMonitor, Probe and ScrapeConfig objects. 2. All metrics generated from recording rules defined in PrometheusRule objects. 3. All alerts generated from alerting rules defined in PrometheusRule objects. 4. All vector selectors of PromQL expressions defined in PrometheusRule objects. The label will not added for objects referenced in spec.excludedFromEnforcement. The label's name is this field's value. The label's value is the namespace of the ServiceMonitor, PodMonitor, Probe, PrometheusRule or ScrapeConfig object.

Property	Type	Description
enforcedSampleLimit	integer	When defined, enforcedSampleLimit specifies a global limit on the number of scraped samples that will be accepted. This overrides any spec.sampleLimit set by ServiceMonitor, PodMonitor, Probe objects unless spec.sampleLimit is greater than zero and less than spec.enforcedSampleLimit. It is meant to be used by admins to keep the overall number of samples/series under a desired limit. When both enforcedSampleLimit and sampleLimit are defined and greater than zero, the following rules apply: * Scrape objects without a defined sampleLimit value will inherit the global sampleLimit value (Prometheus $\geq 2.45.0$) or the enforcedSampleLimit value (Prometheus $< 2.45.0$). If Prometheus version is $\geq 2.45.0$ and the enforcedSampleLimit is greater than the sampleLimit, the sampleLimit will be set to enforcedSampleLimit. * Scrape objects with a sampleLimit value less than or equal to enforcedSampleLimit keep their specific value. * Scrape objects with a sampleLimit value greater than enforcedSampleLimit are set to enforcedSampleLimit.

Property	Type	Description
enforcedTargetLimit	integer	When defined, enforcedTargetLimit specifies a global limit on the number of scraped targets. The value overrides any spec.targetLimit set by ServiceMonitor, PodMonitor, Probe objects unless spec.targetLimit is greater than zero and less than spec.enforcedTargetLimit. It is meant to be used by admins to keep the overall number of targets under a desired limit. When both enforcedTargetLimit and targetLimit are defined and greater than zero, the following rules apply: * Scrape objects without a defined targetLimit value will inherit the global targetLimit value (Prometheus >= 2.45.0) or the enforcedTargetLimit value (Prometheus < v2.45.0). If Prometheus version is >= 2.45.0 and the enforcedTargetLimit is greater than the targetLimit, the targetLimit will be set to enforcedTargetLimit. * Scrape objects with a targetLimit value less than or equal to enforcedTargetLimit keep their specific value. * Scrape objects with a targetLimit value greater than enforcedTargetLimit are set to enforcedTargetLimit.
evaluationInterval	string	Interval between rule evaluations. Default: "30s"
excludedFromEnforcement	array	List of references to PodMonitor, ServiceMonitor, Probe and PrometheusRule objects to be excluded from enforcing a namespace label of origin. It is only applicable if spec.enforcedNamespaceLabel set to true.

Property	Type	Description
excludedFromEnforcement[]	object	ObjectReference references a PodMonitor, ServiceMonitor, Probe or PrometheusRule object.
exemplars	object	Exemplars related settings that are runtime reloadable. It requires to enable the exemplar-storage feature flag to be effective.
externalLabels	object (string)	The labels to add to any time series or alerts when communicating with external systems (federation, remote storage, Alertmanager). Labels defined by spec.replicaExternalLabelName and spec.prometheusExternalLabelName take precedence over this list.
externalUrl	string	The external URL under which the Prometheus service is externally available. This is necessary to generate correct URLs (for instance if Prometheus is accessible behind an Ingress resource).
hostAliases	array	Optional list of hosts and IPs that will be injected into the Pod's hosts file if specified.
hostAliases[]	object	HostAlias holds the mapping between IP and hostnames that will be injected as an entry in the pod's hosts file.

Property	Type	Description
hostNetwork	boolean	Use the host's network namespace if true. Make sure to understand the security implications if you want to enable it (https://kubernetes.io/docs/concepts/configuration/overview/). When hostNetwork is enabled, this will set the DNS policy to ClusterFirstWithHostNet automatically (unless .spec.DNSPolicy is set to a different value).
hostUsers	boolean	HostUsers supports the user space in Kubernetes. More info: https://kubernetes.io/docs/tasks/configure-pod-container/user-namespaces/ The feature requires at least Kubernetes 1.28 with the UserNamespacesSupport feature gate enabled. Starting Kubernetes 1.33, the feature is enabled by default.
ignoreNamespaceSelectors	boolean	When true, spec.namespaceSelector from all PodMonitor, ServiceMonitor and Probe objects will be ignored. They will only discover targets within the namespace of the PodMonitor, ServiceMonitor and Probe object.

Property	Type	Description
image	string	Container image name for Prometheus. If specified, it takes precedence over the spec.baseImage, spec.tag and spec.sha fields. Specifying spec.version is still necessary to ensure the Prometheus Operator knows which version of Prometheus is being configured. If neither spec.image nor spec.baseImage are defined, the operator will use the latest upstream version of Prometheus available at the time when the operator was released.
imagePullPolicy	string	Image pull policy for the 'prometheus', 'init-config-reloader' and 'config-reloader' containers. See https://kubernetes.io/docs/concepts/containers/images/#image-pull-policy for more details.
imagePullSecrets	array	An optional list of references to Secrets in the same namespace to use for pulling images from registries. See http://kubernetes.io/docs/user-guide/images#specifying-imagepullsecrets-on-a-pod
imagePullSecrets[]	object	LocalObjectReference contains enough information to let you locate the referenced object inside the same namespace.

Property	Type	Description
initContainers	array	InitContainers allows injecting initContainers to the Pod definition. Those can be used to e.g. fetch secrets for injection into the Prometheus configuration from external sources. Any errors during the execution of an initContainer will lead to a restart of the Pod. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/ InitContainers described here modify an operator generated init containers if they share the same name and modifications are done via a strategic merge patch. The names of init container name managed by the operator are: * init-config-reloader. Overriding init containers is entirely outside the scope of what the maintainers will support and by doing so, you accept that this behaviour may break at any time without notice.
initContainers[]	object	A single application container that you want to run within a pod.
keepDroppedTargets	integer	Per-scrape limit on the number of targets dropped by relabeling that will be kept in memory. 0 means no limit. It requires Prometheus >= v2.47.0. Note that the global limit only applies to scrape objects that don't specify an explicit limit value. If you want to enforce a maximum limit for all scrape objects, refer to enforcedKeepDroppedTargets.

Property	Type	Description
labelLimit	integer	Per-scrape limit on number of labels that will be accepted for a sample. Only valid in Prometheus versions 2.45.0 and newer. Note that the global limit only applies to scrape objects that don't specify an explicit limit value. If you want to enforce a maximum limit for all scrape objects, refer to <code>enforcedLabelLimit</code>.
labelNameLengthLimit	integer	Per-scrape limit on length of labels name that will be accepted for a sample. Only valid in Prometheus versions 2.45.0 and newer. Note that the global limit only applies to scrape objects that don't specify an explicit limit value. If you want to enforce a maximum limit for all scrape objects, refer to <code>enforcedLabelNameLengthLimit</code>.
labelValueLengthLimit	integer	Per-scrape limit on length of labels value that will be accepted for a sample. Only valid in Prometheus versions 2.45.0 and newer. Note that the global limit only applies to scrape objects that don't specify an explicit limit value. If you want to enforce a maximum limit for all scrape objects, refer to <code>enforcedLabelValueLengthLimit</code>.
listenLocal	boolean	When true, the Prometheus server listens on the loopback address instead of the Pod IP's address.
logFormat	string	Log format for Log level for Prometheus and the config-reloader sidecar.

Property	Type	Description
logLevel	string	Log level for Prometheus and the config-reloader sidecar.
maximumStartupDurationSeconds	integer	Defines the maximum time that the prometheus container's startup probe will wait before being considered failed. The startup probe will return success after the WAL replay is complete. If set, the value should be greater than 60 (seconds). Otherwise it will be equal to 600 seconds (15 minutes).
minReadySeconds	integer	Minimum number of seconds for which a newly created Pod should be ready without any of its container crashing for it to be considered available. If unset, pods will be considered available as soon as they are ready.
nameEscapingScheme	string	Specifies the character escaping scheme that will be requested when scraping for metric and label names that do not conform to the legacy Prometheus character set. It requires Prometheus >= v3.4.0.
nameValidationScheme	string	Specifies the validation scheme for metric and label names. It requires Prometheus >= v2.55.0.
nodeSelector	object (string)	Defines on which Nodes the Pods are scheduled.
otlp	object	Settings related to the OTLP receiver feature. It requires Prometheus >= v2.55.0.

Property	Type	Description
overrideHonorLabels	boolean	When true, Prometheus resolves label conflicts by renaming the labels in the scraped data to "exported_" for all targets created from ServiceMonitor, PodMonitor and ScrapeConfig objects. Otherwise the HonorLabels field of the service or pod monitor applies. In practice, overrideHonorLabels:true enforces honorLabels:false for all ServiceMonitor, PodMonitor and ScrapeConfig objects.
overrideHonorTimestamps	boolean	When true, Prometheus ignores the timestamps for all the targets created from service and pod monitors. Otherwise the HonorTimestamps field of the service or pod monitor applies.
paused	boolean	When a Prometheus deployment is paused, no actions except for deletion will be performed on the underlying objects.
persistentVolumeClaimRetentionPolicy	object	The field controls if and how PVCs are deleted during the lifecycle of a StatefulSet. The default behavior is all PVCs are retained. This is an alpha field from kubernetes 1.23 until 1.26 and a beta field from 1.26. It requires enabling the StatefulSetAutoDeletePVC feature gate.

Property	Type	Description
podMetadata	object	PodMetadata configures labels and annotations which are propagated to the Prometheus pods. The following items are reserved and cannot be overridden: * "prometheus" label, set to the name of the Prometheus object. * "app.kubernetes.io/instance" label, set to the name of the Prometheus object. * "app.kubernetes.io/managed-by" label, set to "prometheus-operator". * "app.kubernetes.io/name" label, set to "prometheus". * "app.kubernetes.io/version" label, set to the Prometheus version. * "operator.prometheus.io/name" label, set to the name of the Prometheus object. * "operator.prometheus.io/shard" label, set to the shard number of the Prometheus object. * "kubectl.kubernetes.io/default-container" annotation, set to "prometheus".
podMonitorNamespaceSelector	object	Namespaces to match for PodMonitors discovery. An empty label selector matches all namespaces. A null label selector (default value) matches the current namespace only.

Property	Type	Description
podMonitorSelector	object	PodMonitors to be selected for target discovery. An empty label selector matches all objects. A null label selector matches no objects. If spec.serviceMonitorSelector, spec.podMonitorSelector, spec.probeSelector and spec.scrapeConfigSelector are null, the Prometheus configuration is unmanaged. The Prometheus operator will ensure that the Prometheus configuration's Secret exists, but it is the responsibility of the user to provide the raw gzipped Prometheus configuration under the prometheus.yaml.gz key. This behavior is deprecated and will be removed in the next major version of the custom resource definition. It is recommended to use spec.additionalScrapeConfigs instead.
podTargetLabels	array (string)	PodTargetLabels are appended to the spec.podTargetLabels field of all PodMonitor and ServiceMonitor objects.
portName	string	Port name used for the pods and governing service. Default: "web"
priorityClassName	string	Priority class assigned to the Pods.
probeNamespaceSelector	object	Namespaces to match for Probe discovery. An empty label selector matches all namespaces. A null label selector matches the current namespace only.

Property	Type	Description
probeSelector	object	Probes to be selected for target discovery. An empty label selector matches all objects. A null label selector matches no objects. If spec.serviceMonitorSelector, spec.podMonitorSelector, spec.probeSelector and spec.scrapeConfigSelector are null, the Prometheus configuration is unmanaged. The Prometheus operator will ensure that the Prometheus configuration's Secret exists, but it is the responsibility of the user to provide the raw gzipped Prometheus configuration under the prometheus.yaml.gz key. This behavior is deprecated and will be removed in the next major version of the custom resource definition. It is recommended to use spec.additionalScrapeConfigs instead.
prometheusExternalLabelName	string	Name of Prometheus external label used to denote the Prometheus instance name. The external label will <i>not</i> be added when the field is set to the empty string (""). Default: "prometheus"
prometheusRulesExcludedFromEnforce	array	Defines the list of PrometheusRule objects to which the namespace label enforcement doesn't apply. This is only relevant when spec.enforcedNamespaceLabel is set to true. Deprecated: use spec.excludedFromEnforcement instead.

Property	Type	Description
prometheusRulesExcludedFromEnforce[]	object	PrometheusRuleExcludeConfig enables users to configure excluded PrometheusRule names and their namespaces to be ignored while enforcing namespace label for alerts and metrics.
query	object	QuerySpec defines the configuration of the Prometheus query service.
queryLogFile	string	queryLogFile specifies where the file to which PromQL queries are logged. If the filename has an empty path, e.g. 'query.log', The Prometheus Pods will mount the file into an emptyDir volume at /var/log/prometheus. If a full path is provided, e.g. '/var/log/prometheus/query.log', you must mount a volume in the specified directory and it must be writable. This is because the prometheus container runs with a read-only root filesystem for security reasons. Alternatively, the location can be set to a standard I/O stream, e.g. /dev/stdout, to log query information to the default Prometheus log stream.
reloadStrategy	string	Defines the strategy used to reload the Prometheus configuration. If not specified, the configuration is reloaded using the <code>/-/reload</code> HTTP endpoint.
remoteRead	array	Defines the list of remote read configurations.
remoteRead[]	object	RemoteReadSpec defines the configuration for Prometheus to read back samples from a remote endpoint.

Property	Type	Description
remoteWrite	array	Defines the list of remote write configurations.
remoteWrite[]	object	RemoteWriteSpec defines the configuration to write samples from Prometheus to a remote endpoint.
remoteWriteReceiverMessageVersions	array (string)	List of the protobuf message versions to accept when receiving the remote writes. It requires Prometheus >= v2.54.0.
replicaExternalLabelName	string	Name of Prometheus external label used to denote the replica name. The external label will <i>not</i> be added when the field is set to the empty string (""). Default: "prometheus_replica"
replicas	integer	Number of replicas of each shard to deploy for a Prometheus deployment. spec.replicas multiplied by spec.shards is the total number of Pods created. Default: 1
resources	object	Defines the resources requests and limits of the 'prometheus' container.
retention	string	How long to retain the Prometheus data. Default: "24h" if spec.retention and spec.retentionSize are empty.
retentionSize	string	Maximum number of bytes used by the Prometheus data.

Property	Type	Description
routePrefix	string	The route prefix Prometheus registers HTTP handlers for. This is useful when using spec.externalURL, and a proxy is rewriting HTTP routes of a request, and the actual ExternalURL is still true, but the server serves requests under a different route prefix. For example for use with kubectx proxy.
ruleNamespaceSelector	object	Namespaces to match for PrometheusRule discovery. An empty label selector matches all namespaces. A null label selector matches the current namespace only.
ruleQueryOffset	string	Defines the offset the rule evaluation timestamp of this particular group by the specified duration into the past. It requires Prometheus $\geq$ v2.53.0.
ruleSelector	object	PrometheusRule objects to be selected for rule evaluation. An empty label selector matches all objects. A null label selector matches no objects.
rules	object	Defines the configuration of the Prometheus rules' engine.
runtime	object	RuntimeConfig configures the values for the Prometheus process behavior

Property	Type	Description
sampleLimit	integer	SampleLimit defines per-scrape limit on number of scraped samples that will be accepted. Only valid in Prometheus versions 2.45.0 and newer. Note that the global limit only applies to scrape objects that don't specify an explicit limit value. If you want to enforce a maximum limit for all scrape objects, refer to <code>enforcedSampleLimit</code>.
scrapeClasses	array	List of scrape classes to expose to scraping objects such as PodMonitors, ServiceMonitors, Probes and ScrapeConfigs. This is an experimental feature, it may change in any upcoming release in a breaking way.
scrapeClasses[]	object	
scrapeClassicHistograms	boolean	Whether to scrape a classic histogram that is also exposed as a native histogram. Notice: scrapeClassicHistograms corresponds to the always_scrape_classic_histograms field in the Prometheus configuration. It requires Prometheus $\geq$ v3.5.0.
scrapeConfigNamespaceSelector	object	Namespaces to match for ScrapeConfig discovery. An empty label selector matches all namespaces. A null label selector matches the current namespace only. Note that the ScrapeConfig custom resource definition is currently at Alpha level.

Property	Type	Description
scrapeConfigSelector	object	ScrapeConfigs to be selected for target discovery. An empty label selector matches all objects. A null label selector matches no objects. If spec.serviceMonitorSelector, spec.podMonitorSelector, spec.probeSelector and spec.scrapeConfigSelector are null, the Prometheus configuration is unmanaged. The Prometheus operator will ensure that the Prometheus configuration's Secret exists, but it is the responsibility of the user to provide the raw gzipped Prometheus configuration under the prometheus.yaml.gz key. This behavior is deprecated and will be removed in the next major version of the custom resource definition. It is recommended to use spec.additionalScrapeConfigs instead. Note that the ScrapeConfig custom resource definition is currently at Alpha level.
scrapeFailureLogFile	string	File to which scrape failures are logged. Reloading the configuration will reopen the file. If the filename has an empty path, e.g. 'file.log', The Prometheus Pods will mount the file into an emptyDir volume at /var/log/prometheus. If a full path is provided, e.g. '/var/log/prometheus/file.log', you must mount a volume in the specified directory and it must be writable. It requires Prometheus >= v2.55.0.
scrapeInterval	string	Interval between consecutive scrapes. Default: "30s"

Property	Type	Description
scrapeProtocols	array (string)	The protocols to negotiate during a scrape. It tells clients the protocols supported by Prometheus in order of preference (from most to least preferred). If unset, Prometheus uses its default value. It requires Prometheus >= v2.49.0. PrometheusText1.0.0 requires Prometheus >= v3.0.0.
scrapeTimeout	string	Number of seconds to wait until a scrape request times out. The value cannot be greater than the scrape interval otherwise the operator will reject the resource.
secrets	array (string)	Secrets is a list of Secrets in the same namespace as the Prometheus object, which shall be mounted into the Prometheus Pods. Each Secret is added to the StatefulSet definition as a volume named secret-<code><secret-name></code>. The Secrets are mounted into <code>/etc/prometheus/secrets/<secret-name></code> in the 'prometheus' container.
securityContext	object	SecurityContext holds pod-level security attributes and common container settings. This defaults to the default PodSecurityContext.
serviceAccountName	string	ServiceAccountName is the name of the ServiceAccount to use to run the Prometheus Pods.

Property	Type	Description
serviceDiscoveryRole	string	Defines the service discovery role used to discover targets from ServiceMonitor objects and Alertmanager endpoints. If set, the value should be either "Endpoints" or "EndpointSlice". If unset, the operator assumes the "Endpoints" role.
serviceMonitorNamespaceSelector	object	Namespaces to match for ServicedMonitors discovery. An empty label selector matches all namespaces. A null label selector (default value) matches the current namespace only.
serviceMonitorSelector	object	ServiceMonitors to be selected for target discovery. An empty label selector matches all objects. A null label selector matches no objects. If spec.serviceMonitorSelector, spec.podMonitorSelector, spec.probeSelector and spec.scrapeConfigSelector are null, the Prometheus configuration is unmanaged. The Prometheus operator will ensure that the Prometheus configuration's Secret exists, but it is the responsibility of the user to provide the raw gzipped Prometheus configuration under the prometheus.yaml.gz key. This behavior is deprecated and will be removed in the next major version of the custom resource definition. It is recommended to use spec.additionalScrapeConfigs instead.

Property	Type	Description
serviceName	string	The name of the service name used by the underlying StatefulSet(s) as the governing service. If defined, the Service must be created before the Prometheus/PrometheusAgent resource in the same namespace and it must define a selector that matches the pod labels. If empty, the operator will create and manage a headless service named prometheus-operated for Prometheus resources, or prometheus-agent-operated for PrometheusAgent resources. When deploying multiple Prometheus/PrometheusAgent resources in the same namespace, it is recommended to specify a different value for each. See https://kubernetes.io/docs/concepts/workloads/controllers/statefulset/#stable-network-id for more details.
sha	string	Deprecated: use 'spec.image' instead. The image's digest can be specified as part of the image name.
shardRetentionPolicy	object	ShardRetentionPolicy defines the retention policy for the Prometheus shards. (Alpha) Using this field requires the 'PrometheusShardRetentionPolicy' feature gate to be enabled. The final goals for this feature can be seen at https://github.com/prometheus-operator/prometheus-operator/blob/main/Documentation/proposals/202310-shard-autoscaling.md#graceful-scale-down-of-prometheus-servers, however, the feature is not yet fully implemented in this PR. The limitation being: * Retention duration is not settable, for now, shards are retained forever.

Property	Type	Description
shards	integer	Number of shards to distribute the scraped targets onto. spec.replicas multiplied by spec.shards is the total number of Pods being created. When not defined, the operator assumes only one shard. Note that scaling down shards will not reshard data onto the remaining instances, it must be manually moved. Increasing shards will not reshard data either but it will continue to be available from the same instances. To query globally, use either * Thanos sidecar + querier for query federation and Thanos Ruler for rules. * Remote-write to send metrics to a central location. By default, the sharding of targets is performed on: * The address target's metadata label for PodMonitor, ServiceMonitor and ScrapeConfig resources. * The param_target label for Probe resources. Users can define their own sharding implementation by setting the __tmp_hash label during the target discovery with relabeling configuration (either in the monitoring resources or via scrape class). You can also disable sharding on a specific target by setting the __tmp_disable_sharding label with relabeling configuration. When the label value isn't empty, all Prometheus shards will scrape the target.
storage	object	Storage defines the storage used by Prometheus.

Property	Type	Description
tag	string	Deprecated: use 'spec.image' instead. The image's tag can be specified as part of the image name.
targetLimit	integer	TargetLimit defines a limit on the number of scraped targets that will be accepted. Only valid in Prometheus versions 2.45.0 and newer. Note that the global limit only applies to scrape objects that don't specify an explicit limit value. If you want to enforce a maximum limit for all scrape objects, refer to enforcedTargetLimit.
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down) which may lead to data corruption. Defaults to 600 seconds.
thanos	object	Defines the configuration of the optional Thanos sidecar.
tolerations	array	Defines the Pods' tolerations if specified.
tolerations[]	object	The pod this Tolerant is attached to tolerates any taint that matches the triple <key,value,effect> using the matching operator <operator>.
topologySpreadConstraints	array	Defines the pod's topology spread constraints if specified.
topologySpreadConstraints[]	object	

Property	Type	Description
tracingConfig	object	TracingConfig configures tracing in Prometheus. This is an experimental feature, it may change in any upcoming release in a breaking way.
tsdb	object	Defines the runtime reloadable configuration of the timeseries database(TSDB). It requires Prometheus >= v2.39.0 or PrometheusAgent >= v2.54.0.
version	string	Version of Prometheus being deployed. The operator uses this information to generate the Prometheus StatefulSet + configuration files. If not specified, the operator assumes the latest upstream version of Prometheus available at the time when the version of the operator was released.
volumeMounts	array	VolumeMounts allows the configuration of additional VolumeMounts. VolumeMounts will be appended to other VolumeMounts in the 'prometheus' container, that are generated as a result of StorageSpec objects.
volumeMounts[]	object	VolumeMount describes a mounting of a Volume within a container.
volumes	array	Volumes allows the configuration of additional volumes on the output StatefulSet definition. Volumes specified will be appended to other volumes that are generated as a result of StorageSpec objects.
volumes[]	object	Volume represents a named volume in a pod that may be accessed by any container in the pod.

Property	Type	Description
walCompression	boolean	Configures compression of the write-ahead log (WAL) using Snappy. WAL compression is enabled by default for Prometheus $\geq$ 2.20.0 Requires Prometheus v2.11.0 and above.
web	object	Defines the configuration of the Prometheus web server.

8.1.2. .spec.additionalAlertManagerConfigs

Description

AdditionalAlertManagerConfigs specifies a key of a Secret containing additional Prometheus Alertmanager configurations. The Alertmanager configurations are appended to the configuration generated by the Prometheus Operator. They must be formatted according to the official Prometheus documentation:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#alertmanager_config

The user is responsible for making sure that the configurations are valid

Note that using this feature may expose the possibility to break upgrades of Prometheus. It is advised to review Prometheus release notes to ensure that no incompatible AlertManager configs are going to break Prometheus after the upgrade.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

8.1.3. .spec.additionalAlertRelabelConfigs

Description

AdditionalAlertRelabelConfigs specifies a key of a Secret containing additional Prometheus alert relabel configurations. The alert relabel configurations are appended to the configuration generated by the Prometheus Operator. They must be formatted according to the official Prometheus documentation:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#alert_relabel_configs

The user is responsible for making sure that the configurations are valid

Note that using this feature may expose the possibility to break upgrades of Prometheus. It is advised to review Prometheus release notes to ensure that no incompatible alert relabel configs are going to break Prometheus after the upgrade.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.4. .spec.additionalArgs

Description

AdditionalArgs allows setting additional arguments for the 'prometheus' container.

It is intended for e.g. activating hidden flags which are not supported by the dedicated configuration options yet. The arguments are passed as-is to the Prometheus container which may cause issues if they are invalid or not supported by the given Prometheus version.

In case of an argument conflict (e.g. an argument which is already set by the operator itself) or when providing an invalid argument, the reconciliation will fail and an error will be logged.

Type

array

8.1.5. .spec.additionalArgs[]

Description

Argument as part of the AdditionalArgs list.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name of the argument, e.g. "scrape.discovery-reload-interval".
value	string	Argument value, e.g. 30s. Can be empty for name-only arguments (e.g. --storage.tsdb.no-lockfile)

8.1.6. .spec.additionalScrapeConfigs

Description

AdditionalScrapeConfigs allows specifying a key of a Secret containing additional Prometheus scrape configurations. Scrape configurations specified are appended to the configurations generated by the Prometheus Operator. Job configurations specified must have the form as specified in the official Prometheus documentation:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#scrape_config. As scrape configs are appended, the user is responsible to make sure it is valid. Note that using this feature may expose the possibility to break upgrades of Prometheus. It is advised to review Prometheus release notes to ensure that no incompatible scrape configs are going to break Prometheus after the upgrade.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.7. .spec.affinity

Description

Defines the Pods' affinity scheduling rules if specified.

Type

object

Property	Type	Description
nodeAffinity	object	Describes node affinity scheduling rules for the pod.
podAffinity	object	Describes pod affinity scheduling rules (e.g. co-locate this pod in the same node, zone, etc. as some other pod(s)).
podAntiAffinity	object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same node, zone, etc. as some other pod(s)).

8.1.8. .spec.affinity.nodeAffinity

Description

Describes node affinity scheduling rules for the pod.

Type

object

Property	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	array	The scheduler will prefer to schedule pods to nodes that satisfy the affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node matches the corresponding matchExpressions; the node(s) with the highest sum are the most preferred.
preferredDuringSchedulingIgnoredDuringExecution[]	object	An empty preferred scheduling term matches all objects with implicit weight 0 (i.e. it's a no-op). A null preferred scheduling term matches no objects (i.e. is also a no-op).
requiredDuringSchedulingIgnoredDuringExecution	object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

8.1.9. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

The scheduler will prefer to schedule pods to nodes that satisfy the affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node matches the corresponding matchExpressions; the node(s) with the highest sum are the most preferred.

Type

array**8.1.10. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[]****Description**

An empty preferred scheduling term matches all objects with implicit weight 0 (i.e. it's a no-op). A null preferred scheduling term matches no objects (i.e. is also a no-op).

Type**object****Required**

- **preference**
- **weight**

Property	Type	Description
preference	object	A node selector term, associated with the corresponding weight.
weight	integer	Weight associated with matching the corresponding nodeSelectorTerm, in the range 1-100.

8.1.11. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[]**Description**

A node selector term, associated with the corresponding weight.

Type**object**

Property	Type	Description
matchExpressions	array	A list of node selector requirements by node's labels.
matchExpressions[]	object	A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchFields	array	A list of node selector requirements by node's fields.

Property	Type	Description
matchFields[]	object	A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

8.1.12. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[

Description

A list of node selector requirements by node's labels.

Type

array

8.1.13. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[

Description

A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	The label key that the selector applies to.
operator	string	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt.

Property	Type	Description
values	array (string)	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

8.1.14. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[

Description

A list of node selector requirements by node's fields.

Type

array

8.1.15. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[

Description

A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	The label key that the selector applies to.
operator	string	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt.

Property	Type	Description
values	array (string)	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

8.1.16. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Type

object

Required

- **nodeSelectorTerms**

Property	Type	Description
nodeSelectorTerms	array	Required. A list of node selector terms. The terms are ORed.
nodeSelectorTerms[]	object	A null or empty node selector term matches no objects. The requirements of them are ANDed. The TopologySelectorTerm type implements a subset of the NodeSelectorTerm.

8.1.17. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.n

Description

Required. A list of node selector terms. The terms are ORed.

Type

array

8.1.18. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.n

Description

A null or empty node selector term matches no objects. The requirements of them are ANDed. The TopologySelectorTerm type implements a subset of the NodeSelectorTerm.

Type

object

Property	Type	Description
matchExpressions	array	A list of node selector requirements by node's labels.
matchExpressions[]	object	A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchFields	array	A list of node selector requirements by node's fields.
matchFields[]	object	A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

8.1.19. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.n**Description**

A list of node selector requirements by node's labels.

Type

array

8.1.20. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.r**Description**

A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	The label key that the selector applies to.
operator	string	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist, Gt, and Lt.
values	array (string)	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

8.1.21. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.n

Description

A list of node selector requirements by node's fields.

Type

array

8.1.22. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.n

Description

A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	The label key that the selector applies to.

Property	Type	Description
operator	string	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist, Gt, and Lt.
values	array (string)	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

8.1.23. .spec.affinity.podAffinity

Description

Describes pod affinity scheduling rules (e.g. co-locate this pod in the same node, zone, etc. as some other pod(s)).

Type

object

Property	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	array	The scheduler will prefer to schedule pods to nodes that satisfy the affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.

Property	Type	Description
preferredDuringSchedulingIgnoredDuringExecution[]	object	The weights of all of the matched WeightedPodAffinityTerm fields are added per-node to find the most preferred node(s)
requiredDuringSchedulingIgnoredDuringExecution	array	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.
requiredDuringSchedulingIgnoredDuringExecution[]	object	Defines a set of pods (namely those matching the labelSelector relative to the given namespace(s)) that this pod should be co-located (affinity) or not co-located (anti-affinity) with, where co-located is defined as running on a node whose value of the label with key <topologyKey> matches that of any node on which a pod of the set of pods is running

8.1.24. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

The scheduler will prefer to schedule pods to nodes that satisfy the affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.

Type

array

8.1.25. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

The weights of all of the matched WeightedPodAffinityTerm fields are added per-node to find the most preferred node(s)

Type**object****Required**

- **podAffinityTerm**
- **weight**

Property	Type	Description
podAffinityTerm	object	Required. A pod affinity term, associated with the corresponding weight.
weight	integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

8.1.26. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

Required. A pod affinity term, associated with the corresponding weight.

Type**object****Required**

- **topologyKey**

Property	Type	Description
labelSelector	object	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.

Property	Type	Description
matchLabelKeys	array (string)	MatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key in (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both matchLabelKeys and labelSelector. Also, matchLabelKeys cannot be set when labelSelector isn't set.
mismatchLabelKeys	array (string)	MismatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key notin (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both mismatchLabelKeys and labelSelector. Also, mismatchLabelKeys cannot be set when labelSelector isn't set.

Property	Type	Description
namespaceSelector	object	A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.
namespaces	array (string)	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	string	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

8.1.27. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.

Property	Type	Description
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.28. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.29. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.30. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.31. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.32. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.33. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Type

array

8.1.34. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[]

Description

Defines a set of pods (namely those matching the labelSelector relative to the given namespace(s))

that this pod should be co-located (affinity) or not co-located (anti-affinity) with, where co-located is defined as running on a node whose value of the label with key <topologyKey> matches that of any node on which a pod of the set of pods is running

Type

object

Required

- **topologyKey**

Property	Type	Description
labelSelector	object	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.
matchLabelKeys	array (string)	MatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key in (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both matchLabelKeys and labelSelector. Also, matchLabelKeys cannot be set when labelSelector isn't set.

Property	Type	Description
mismatchLabelKeys	array (string)	MismatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key notin (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both mismatchLabelKeys and labelSelector. Also, mismatchLabelKeys cannot be set when labelSelector isn't set.
namespaceSelector	object	A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.
namespaces	array (string)	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".

Property	Type	Description
topologyKey	string	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

8.1.35. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[.].

Description

A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.36. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[.].

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.37. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].l

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.38. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].l

Description

A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.

Property	Type	Description
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.39. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.40. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[.].

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.41. .spec.affinity.podAntiAffinity

Description

Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same node, zone, etc. as some other pod(s)).

Type

object

Property	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	array	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
preferredDuringSchedulingIgnoredDuringExecution[]	object	The weights of all of the matched WeightedPodAffinityTerm fields are added per-node to find the most preferred node(s)

Property	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	array	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.
requiredDuringSchedulingIgnoredDuringExecution[]	object	Defines a set of pods (namely those matching the labelSelector relative to the given namespace(s)) that this pod should be co-located (affinity) or not co-located (anti-affinity) with, where co-located is defined as running on a node whose value of the label with key <topologyKey> matches that of any node on which a pod of the set of pods is running

8.1.42. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.

Type

array

8.1.43. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

The weights of all of the matched WeightedPodAffinityTerm fields are added per-node to find the most preferred node(s)

Type

object

Required

- **podAffinityTerm**
- **weight**

Property	Type	Description
podAffinityTerm	object	Required. A pod affinity term, associated with the corresponding weight.
weight	integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

8.1.44. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecut

Description

Required. A pod affinity term, associated with the corresponding weight.

Type

object

Required

- **topologyKey**

Property	Type	Description
labelSelector	object	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.

Property	Type	Description
matchLabelKeys	array (string)	MatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key in (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both matchLabelKeys and labelSelector. Also, matchLabelKeys cannot be set when labelSelector isn't set.
mismatchLabelKeys	array (string)	MismatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key notin (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both mismatchLabelKeys and labelSelector. Also, mismatchLabelKeys cannot be set when labelSelector isn't set.

Property	Type	Description
namespaceSelector	object	A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.
namespaces	array (string)	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	string	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

8.1.45. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.

Property	Type	Description
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.46. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecut

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.47. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecut

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.48. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecut

Description

A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.49. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecut

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.50. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.51. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Type

array

8.1.52. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

Defines a set of pods (namely those matching the labelSelector relative to the given namespace(s)) that this pod should be co-located (affinity) or not co-located (anti-affinity) with, where co-located is defined as running on a node whose value of the label with key <topologyKey> matches that of any

node on which a pod of the set of pods is running

Type

object

Required

- **topologyKey**

Property	Type	Description
labelSelector	object	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.
matchLabelKeys	array (string)	MatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key in (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both matchLabelKeys and labelSelector. Also, matchLabelKeys cannot be set when labelSelector isn't set.

Property	Type	Description
mismatchLabelKeys	array (string)	MismatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key notin (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both mismatchLabelKeys and labelSelector. Also, mismatchLabelKeys cannot be set when labelSelector isn't set.
namespaceSelector	object	A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.
namespaces	array (string)	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".

Property	Type	Description
topologyKey	string	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

8.1.53. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.54. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.55. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.56. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.

Property	Type	Description
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.57. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecutic

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.58. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecutic

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.59. .spec.alerting

Description

Defines the settings related to Alertmanager.

Type

object

Required

- **alertmanagers**

Property	Type	Description
alertmanagers	array	Alertmanager endpoints where Prometheus should send alerts to.
alertmanagers[]	object	AlertmanagerEndpoints defines a selection of a single Endpoints object containing Alertmanager IPs to fire alerts against.

8.1.60. .spec.alerting.alertmanagers

Description

Alertmanager endpoints where Prometheus should send alerts to.

Type

array

8.1.61. .spec.alerting.alertmanagers[]

Description

AlertmanagerEndpoints defines a selection of a single Endpoints object containing Alertmanager IPs to fire alerts against.

Type

object

Required

- **name**
- **port**

Property	Type	Description
alertRelabelings	array	Relabeling configs applied before sending alerts to a specific Alertmanager. It requires Prometheus $\geq$ v2.51.0.
alertRelabelings[]	object	RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config
apiVersion	string	Version of the Alertmanager API that Prometheus uses to send alerts. It can be "V1" or "V2". The field has no effect for Prometheus $\geq$ v3.0.0 because only the v2 API is supported.
authorization	object	Authorization section for Alertmanager. Cannot be set at the same time as basicAuth, bearerTokenFile or sigv4.
basicAuth	object	BasicAuth configuration for Alertmanager. Cannot be set at the same time as bearerTokenFile, authorization or sigv4.

Property	Type	Description
bearerTokenFile	string	File to read bearer token for Alertmanager. Cannot be set at the same time as basicAuth, authorization, or sigv4. Deprecated: this will be removed in a future release. Prefer using authorization.
enableHttp2	boolean	Whether to enable HTTP2.
name	string	Name of the Endpoints object in the namespace.
namespace	string	Namespace of the Endpoints object. If not set, the object will be discovered in the namespace of the Prometheus object.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
pathPrefix	string	Prefix for the HTTP path alerts are pushed to.
port	integer-or-string	Port on which the Alertmanager API is exposed.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	

Property	Type	Description
proxyConnectHeader{}}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
relabelings	array	Relabel configuration applied to the discovered Alertmanagers.
relabelings[]	object	RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config
scheme	string	Scheme to use when firing alerts.
sigv4	object	Sigv4 allows to configures AWS's Signature Verification 4 for the URL. It requires Prometheus >= v2.48.0. Cannot be set at the same time as basicAuth , bearerTokenFile or authorization .
timeout	string	Timeout is a per-target Alertmanager timeout when pushing alerts.
tlsConfig	object	TLS Config to use for Alertmanager.

8.1.62. .spec.alerting.alertmanagers[].alertRelabelings

Description

Relabeling configs applied before sending alerts to a specific Alertmanager. It requires Prometheus $\geq$ v2.51.0.

Type

array

8.1.63. .spec.alerting.alertmanagers[].alertRelabelings[]**Description**

RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples.

More info:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

object

Property	Type	Description
action	string	Action to perform based on the regex matching. Uppercase and Lowercase actions require Prometheus $\geq$ v2.36.0. DropEqual and KeepEqual actions require Prometheus $\geq$ v2.41.0. Default: "Replace"
modulus	integer	Modulus to take of the hash of the source label values. Only applicable when the action is HashMod.
regex	string	Regular expression against which the extracted value is matched.
replacement	string	Replacement value against which a Replace action is performed if the regular expression matches. Regex capture groups are available.
separator	string	Separator is the string between concatenated SourceLabels.

Property	Type	Description
sourceLabels	array (string)	The source labels select values from existing labels. Their content is concatenated using the configured Separator and matched against the configured regular expression.
targetLabel	string	Label to which the resulting string is written in a replacement. It is mandatory for Replace, HashMod, Lowercase, Uppercase, KeepEqual and DropEqual actions. Regex capture groups are available.

8.1.64. .spec.alerting.alertmanagers[].authorization

Description

Authorization section for Alertmanager.

Cannot be set at the same time as **basicAuth**, **bearerTokenFile** or **sigv4**.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

8.1.65. .spec.alerting.alertmanagers[].authorization.credentials

Description

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.66. .spec.alerting.alertmanagers[].basicAuth

Description

BasicAuth configuration for Alertmanager.

Cannot be set at the same time as **bearerTokenFile**, **authorization** or **sigv4**.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

8.1.67. .spec.alerting.alertmanagers[].basicAuth.password

Description

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.68. .spec.alerting.alertmanagers[].basicAuth.username

Description

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.69. .spec.alerting.alertmanagers[].proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus $\geq$ v2.43.0, Alertmanager $\geq$ v0.25.0 or Thanos $\geq$ v0.32.0.

Type

object

8.1.70. .spec.alerting.alertmanagers[].proxyConnectHeader{}

Description

Type

array

8.1.71. .spec.alerting.alertmanagers[].proxyConnectHeader{[]}[]

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.72. .spec.alerting.alertmanagers[].relabelings

Description

Relabel configuration applied to the discovered Alertmanagers.

Type

array

8.1.73. .spec.alerting.alertmanagers[].relabelings[]

Description

RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples.

More info:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

object

Property	Type	Description
action	string	Action to perform based on the regex matching. Uppercase and Lowercase actions require Prometheus >= v2.36.0. DropEqual and KeepEqual actions require Prometheus >= v2.41.0. Default: "Replace"
modulus	integer	Modulus to take of the hash of the source label values. Only applicable when the action is HashMod .
regex	string	Regular expression against which the extracted value is matched.
replacement	string	Replacement value against which a Replace action is performed if the regular expression matches. Regex capture groups are available.
separator	string	Separator is the string between concatenated SourceLabels.

Property	Type	Description
sourceLabels	array (string)	The source labels select values from existing labels. Their content is concatenated using the configured Separator and matched against the configured regular expression.
targetLabel	string	Label to which the resulting string is written in a replacement. It is mandatory for Replace, HashMod, Lowercase, Uppercase, KeepEqual and DropEqual actions. Regex capture groups are available.

8.1.74. .spec.alerting.alertmanagers[].sigv4

Description

Sigv4 allows to configure AWS's Signature Verification 4 for the URL. It requires Prometheus $\geq$ v2.48.0.

Cannot be set at the same time as **basicAuth**, **bearerTokenFile** or **authorization**.

Type

object

Property	Type	Description
accessKey	object	AccessKey is the AWS API key. If not specified, the environment variable AWS_ACCESS_KEY_ID is used.
profile	string	Profile is the named AWS profile used to authenticate.
region	string	Region is the AWS region. If blank, the region from the default credentials chain is used.
roleArn	string	RoleArn is the named AWS profile used to authenticate.

Property	Type	Description
secretKey	object	SecretKey is the AWS API secret. If not specified, the environment variable AWS_SECRET_ACCESS_KEY is used.

8.1.75. .spec.alerting.alertmanagers[].sigv4.accessKey

Description

AccessKey is the AWS API key. If not specified, the environment variable **AWS_ACCESS_KEY_ID** is used.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.76. .spec.alerting.alertmanagers[].sigv4.secretKey

Description

SecretKey is the AWS API secret. If not specified, the environment variable **AWS_SECRET_ACCESS_KEY** is used.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.77. .spec.alerting.alertmanagers[].tlsConfig

Description

TLS Config to use for Alertmanager.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
caFile	string	Path to the CA cert in the Prometheus container to use for the targets.
cert	object	Client certificate to present when doing client-authentication.
certFile	string	Path to the client cert file in the Prometheus container for the targets.
insecureSkipVerify	boolean	Disable target certificate validation.

Property	Type	Description
keyFile	string	Path to the client key file in the Prometheus container for the targets.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

8.1.78. .spec.alerting.alertmanagers[].tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.79. .spec.alerting.alertmanagers[].tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.80. .spec.alerting.alertmanagers[].tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.81. .spec.alerting.alertmanagers[].tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.82. .spec.alerting.alertmanagers[].tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.83. .spec.alerting.alertmanagers[].tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.84. .spec.alerting.alertmanagers[].tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.85. .spec.apiserverConfig

Description

APIServerConfig allows specifying a host and auth methods to access the Kubernetes API server. If null, Prometheus is assumed to run inside of the cluster: it will discover the API servers automatically and use the Pod's CA certificate and bearer token file at `/var/run/secrets/kubernetes.io/serviceaccount/`.

Type

object

Required

- **host**

Property	Type	Description
authorization	object	Authorization section for the API server. Cannot be set at the same time as basicAuth, bearerToken, or bearerTokenFile.
basicAuth	object	BasicAuth configuration for the API server. Cannot be set at the same time as authorization, bearerToken, or bearerTokenFile.
bearerToken	string	Warning: this field shouldn't be used because the token value appears in clear-text. Prefer using authorization. Deprecated: this will be removed in a future release.
bearerTokenFile	string	File to read bearer token for accessing apiserver. Cannot be set at the same time as basicAuth, authorization, or bearerToken. Deprecated: this will be removed in a future release. Prefer using authorization.

Property	Type	Description
host	string	Kubernetes API address consisting of a hostname or IP address followed by an optional port number.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
tlsConfig	object	TLS Config to use for the API server.

8.1.86. .spec.apiserverConfig.authorization

Description

Authorization section for the API server.

Cannot be set at the same time as **basicAuth**, **bearerToken**, or **bearerTokenFile**.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
credentialsFile	string	File to read a secret from, mutually exclusive with credentials .
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

8.1.87. .spec.apiserverConfig.authorization.credentials

Description

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

8.1.88. .spec.apiserverConfig.basicAuth

Description

BasicAuth configuration for the API server.

Cannot be set at the same time as **authorization**, **bearerToken**, or **bearerTokenFile**.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

8.1.89. .spec.apiserverConfig.basicAuth.password

Description

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.90. .spec.apiserverConfig.basicAuth.username

Description

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.91. .spec.apiserverConfig.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests.

It requires Prometheus $\geq$ v2.43.0, Alertmanager $\geq$ v0.25.0 or Thanos $\geq$ v0.32.0.

Type

object

8.1.92. .spec.apiserverConfig.proxyConnectHeader{}

Description

Type

array

8.1.93. .spec.apiserverConfig.proxyConnectHeader{[]}[]

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.94. .spec.apiserverConfig.tlsConfig

Description

TLS Config to use for the API server.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
caFile	string	Path to the CA cert in the Prometheus container to use for the targets.
cert	object	Client certificate to present when doing client-authentication.
certFile	string	Path to the client cert file in the Prometheus container for the targets.
insecureSkipVerify	boolean	Disable target certificate validation.
keyFile	string	Path to the client key file in the Prometheus container for the targets.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

8.1.95. .spec.apiserverConfig.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.96. .spec.apiserverConfig.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.97. .spec.apiserverConfig.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.98. .spec.apiserverConfig.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.99. .spec.apiserverConfig.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.100. .spec.apiserverConfig.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.101. .spec.apiserverConfig.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object**Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.102. .spec.arbitraryFSAccessThroughSMs**Description**

When true, ServiceMonitor, PodMonitor and Probe object are forbidden to reference arbitrary files on the file system of the 'prometheus' container. When a ServiceMonitor's endpoint specifies a **bearerTokenFile** value (e.g. '/var/run/secrets/kubernetes.io/serviceaccount/token'), a malicious target can get access to the Prometheus service account's token in the Prometheus' scrape request. Setting **spec.arbitraryFSAccessThroughSM** to 'true' would prevent the attack. Users should instead provide the credentials using the **spec.bearerTokenSecret** field.

Type**object**

Property	Type	Description
deny	boolean	

8.1.103. .spec.containers**Description**

Containers allows injecting additional containers or modifying operator generated containers. This can be used to allow adding an authentication proxy to the Pods or to change the behavior of an operator generated container. Containers described here modify an operator generated container if they share the same name and modifications are done via a strategic merge patch.

The names of containers managed by the operator are: * **prometheus** * **config-reloader** * **thanos-sidecar**

Overriding containers is entirely outside the scope of what the maintainers will support and by doing so, you accept that this behaviour may break at any time without notice.

Type**array****8.1.104. .spec.containers[]****Description**

A single application container that you want to run within a pod.

Type**object****Required**

- **name**

Property	Type	Description
args	array (string)	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references <code>\$(VAR_NAME)</code> are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double are reduced to a single <code>\$</code> , which allows for escaping the <code>\$(VAR_NAME)</code> syntax: i.e. " <code>\$(VAR_NAME)</code> " will produce the string literal <code>"\$(VAR_NAME)"</code> . Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Property	Type	Description
command	array (string)	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$(VAR_NAME)" will produce the string literal "\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	array	List of environment variables to set in the container. Cannot be updated.
env[]	object	EnvVar represents an environment variable present in a Container.
envFrom	array	List of sources to populate environment variables in the container. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.
envFrom[]	object	EnvFromSource represents the source of a set of ConfigMaps or Secrets

Property	Type	Description
image	string	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
imagePullPolicy	string	Image pull policy. One of Always, Never, IfNotPresent. Defaults to Always if :latest tag is specified, or IfNotPresent otherwise. Cannot be updated. More info: https://kubernetes.io/docs/concepts/containers/images#updating-images
lifecycle	object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	string	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.

Property	Type	Description
ports	array	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
ports[]	object	ContainerPort represents a network port in a single container.
readinessProbe	object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
resizePolicy	array	Resources resize policy for the container.
resizePolicy[]	object	ContainerResizePolicy represents resource resize policy for the container.
resources	object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Property	Type	Description
restartPolicy	string	RestartPolicy defines the restart behavior of individual containers in a pod. This field may only be set for init containers, and the only allowed value is "Always". For non-init containers or when this field is not specified, the restart behavior is defined by the Pod's restart policy and the container type. Setting the RestartPolicy as "Always" for the init container will have the following effect: this init container will be continually restarted on exit until all regular containers have terminated. Once all regular containers have completed, all init containers with restartPolicy "Always" will be shut down. This lifecycle differs from normal init containers and is often referred to as a "sidecar" container. Although this init container still starts in the init container sequence, it does not wait for the container to complete before proceeding to the next init container. Instead, the next init container starts immediately after this init container is started, or after any startupProbe has successfully completed.
securityContext	object	SecurityContext defines the security options the container should be run with. If set, the fields of SecurityContext override the equivalent fields of PodSecurityContext. More info: https://kubernetes.io/docs/tasks/configure-pod-container/security-context/

Property	Type	Description
startupProbe	object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
stdinOnce	boolean	Whether the container runtime should close the stdin channel after it has been opened by a single attach. When stdin is true the stdin stream will remain open across multiple attach sessions. If stdinOnce is set to true, stdin is opened on container start, is empty until the first client attaches to stdin, and then remains open and accepts data until the client disconnects, at which time stdin is closed and remains closed until the container is restarted. If this flag is false, a container processes that reads from stdin will never receive an EOF. Default is false

Property	Type	Description
terminationMessagePath	string	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.
terminationMessagePolicy	string	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated.
tty	boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeDevices	array	volumeDevices is the list of block devices to be used by the container.
volumeDevices[]	object	volumeDevice describes a mapping of a raw block device within a container.
volumeMounts	array	Pod volumes to mount into the container's filesystem. Cannot be updated.

Property	Type	Description
volumeMounts[]	object	VolumeMount describes a mounting of a Volume within a container.
workingDir	string	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated.

8.1.105. .spec.containers[].env

Description

List of environment variables to set in the container. Cannot be updated.

Type

array

8.1.106. .spec.containers[].env[]

Description

EnvVar represents an environment variable present in a Container.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name of the environment variable. Must be a C_IDENTIFIER.

Property	Type	Description
value	string	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	object	Source for the environment variable's value. Cannot be used if value is not empty.

8.1.107. .spec.containers[].env[].valueFrom

Description

Source for the environment variable's value. Cannot be used if value is not empty.

Type

object

Property	Type	Description
configMapKeyRef	object	Selects a key of a ConfigMap.
fieldRef	object	Selects a field of the pod: supports metadata.name, metadata.namespace, metadata.labels['<KEY>'] , metadata.annotations['<KEY>'] , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.

Property	Type	Description
resourceFieldRef	object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, limits.ephemeral-storage, requests.cpu, requests.memory and requests.ephemeral-storage) are currently supported.
secretKeyRef	object	Selects a key of a secret in the pod's namespace

8.1.108. .spec.containers[].env[].valueFrom.configMapKeyRef

Description

Selects a key of a ConfigMap.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.109. .spec.containers[].env[].valueFrom.fieldRef

Description

Selects a field of the pod: supports metadata.name, metadata.namespace, **metadata.labels['<KEY>']**, **metadata.annotations['<KEY>']**, spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.

Type

object

Required

- **fieldPath**

Property	Type	Description
apiVersion	string	Version of the schema the FieldPath is written in terms of, defaults to "v1".
fieldPath	string	Path of the field to select in the specified API version.

8.1.110. .spec.containers[].env[].valueFrom.resourceFieldRef

Description

Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, limits.ephemeral-storage, requests.cpu, requests.memory and requests.ephemeral-storage) are currently supported.

Type

object

Required

- **resource**

Property	Type	Description
containerName	string	Container name: required for volumes, optional for env vars
divisor	integer-or-string	Specifies the output format of the exposed resources, defaults to "1"
resource	string	Required: resource to select

8.1.111. .spec.containers[].env[].valueFrom.secretKeyRef

Description

Selects a key of a secret in the pod's namespace

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.112. .spec.containers[].envFrom

Description

List of sources to populate environment variables in the container. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Type

array

8.1.113. .spec.containers[].envFrom[]

Description

EnvFromSource represents the source of a set of ConfigMaps or Secrets

Type

object

Property	Type	Description
configMapRef	object	The ConfigMap to select from
prefix	string	Optional text to prepend to the name of each environment variable. Must be a C_IDENTIFIER.
secretRef	object	The Secret to select from

8.1.114. .spec.containers[].envFrom[].configMapRef

Description

The ConfigMap to select from

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap must be defined

8.1.115. .spec.containers[].envFrom[].secretRef

Description

The Secret to select from

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret must be defined

8.1.116. .spec.containers[].lifecycle

Description

Actions that the management system should take in response to container lifecycle events. Cannot be updated.

Type
object

Property	Type	Description
postStart	object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
stopSignal	string	StopSignal defines which signal will be sent to a container when it is being stopped. If not specified, the default is defined by the container runtime in use. StopSignal can only be set for Pods with a non-empty .spec.os.name

8.1.117. .spec.containers[].lifecycle.postStart

Description

PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: <https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
sleep	object	Sleep represents a duration that the container should sleep.
tcpSocket	object	Deprecated. TCPSocket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

8.1.118. .spec.containers[].lifecycle.postStart.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

8.1.119. .spec.containers[].lifecycle.postStart.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.

Property	Type	Description
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

8.1.120. .spec.containers[].lifecycle.postStart.httpGet.httpHeaders

Description

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

8.1.121. .spec.containers[].lifecycle.postStart.httpGet.httpHeaders[]

Description

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

8.1.122. .spec.containers[].lifecycle.postStart.sleep

Description

Sleep represents a duration that the container should sleep.

Type

object

Required

- **seconds**

Property	Type	Description
seconds	integer	Seconds is the number of seconds to sleep.

8.1.123. .spec.containers[].lifecycle.postStart.tcpSocket**Description**

Deprecated. TCP socket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

8.1.124. .spec.containers[].lifecycle.preStop**Description**

PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: <https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
sleep	object	Sleep represents a duration that the container should sleep.
tcpSocket	object	Deprecated. TCPSocket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

8.1.125. .spec.containers[].lifecycle.preStop.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

8.1.126. .spec.containers[].lifecycle.preStop.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

8.1.127. .spec.containers[].lifecycle.preStop.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

8.1.128. .spec.containers[].lifecycle.preStop.httpGet.httpHeaders[]**Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

8.1.129. .spec.containers[].lifecycle.preStop.sleep

Description

Sleep represents a duration that the container should sleep.

Type

object

Required

- **seconds**

Property	Type	Description
seconds	integer	Seconds is the number of seconds to sleep.

8.1.130. .spec.containers[].lifecycle.preStop.tcpSocket

Description

Deprecated. TCP Socket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.

Property	Type	Description
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

8.1.131. .spec.containers[].livenessProbe

Description

Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: <https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
failureThreshold	integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
grpc	object	GRPC specifies a GRPC HealthCheckRequest.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
initialDelaySeconds	integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.

Property	Type	Description
successThreshold	integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	object	TCPSocket specifies a connection to a TCP port.
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully upon probe failure. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. If this value is nil, the pod's terminationGracePeriodSeconds will be used. Otherwise, this value overrides the value provided by the pod spec. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). This is a beta field and requires enabling ProbeTerminationGracePeriod feature gate. Minimum value is 1. spec.terminationGracePeriodSeconds is used if unset.
timeoutSeconds	integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

8.1.132. .spec.containers[].livenessProbe.exec

Description

Exec specifies a command to execute in the container.

Type
object

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

8.1.133. .spec.containers[].livenessProbe.grpc

Description

GRPC specifies a GRPC HealthCheckRequest.

Type
object

Required

- **port**

Property	Type	Description
port	integer	Port number of the gRPC service. Number must be in the range 1 to 65535.
service	string	Service is the name of the service to place in the gRPC HealthCheckRequest (see https://github.com/grpc/grpc/blob/master/doc/health-checking.md). If this is not specified, the default behavior is defined by gRPC.

8.1.134. .spec.containers[].livenessProbe.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type**object****Required**

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

8.1.135. .spec.containers[].livenessProbe.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type**array****8.1.136. .spec.containers[].livenessProbe.httpGet.httpHeaders[]****Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type**object****Required**

- **name**

- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

8.1.137. .spec.containers[].livenessProbe.tcpSocket

Description

TCPSocket specifies a connection to a TCP port.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

8.1.138. .spec.containers[].ports

Description

List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See <https://github.com/kubernetes/kubernetes/issues/108255>. Cannot be updated.

Type

array

8.1.139. .spec.containers[].ports[]

Description

ContainerPort represents a network port in a single container.

Type

object

Required

- **containerPort**

Property	Type	Description
containerPort	integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
hostIP	string	What host IP to bind the external port to.
hostPort	integer	Number of port to expose on the host. If specified, this must be a valid port number, $0 < x < 65536$. If HostNetwork is specified, this must match ContainerPort. Most containers do not need this.
name	string	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services.
protocol	string	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP".

8.1.140. .spec.containers[].readinessProbe

Description

Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info:

<https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.

Property	Type	Description
failureThreshold	integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
grpc	object	GRPC specifies a GRPC HealthCheckRequest.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
initialDelaySeconds	integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	object	TCPSocket specifies a connection to a TCP port.

Property	Type	Description
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully upon probe failure. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. If this value is nil, the pod's terminationGracePeriodSeconds will be used. Otherwise, this value overrides the value provided by the pod spec. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). This is a beta field and requires enabling ProbeTerminationGracePeriod feature gate. Minimum value is 1. spec.terminationGracePeriodSeconds is used if unset.
timeoutSeconds	integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

8.1.141. .spec.containers[].readinessProbe.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

8.1.142. .spec.containers[].readinessProbe.grpc

Description

GRPC specifies a GRPC HealthCheckRequest.

Type

object

Required

- **port**

Property	Type	Description
port	integer	Port number of the gRPC service. Number must be in the range 1 to 65535.
service	string	Service is the name of the service to place in the gRPC HealthCheckRequest (see https://github.com/grpc/grpc/blob/master/doc/health-checking.md). If this is not specified, the default behavior is defined by gRPC.

8.1.143. .spec.containers[].readinessProbe.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

8.1.144. .spec.containers[].readinessProbe.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

8.1.145. .spec.containers[].readinessProbe.httpGet.httpHeaders[]**Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

8.1.146. .spec.containers[].readinessProbe.tcpSocket

Description

TCP socket specifies a connection to a TCP port.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

8.1.147. .spec.containers[].resizePolicy

Description

Resources resize policy for the container.

Type

array

8.1.148. .spec.containers[].resizePolicy[]

Description

ContainerResizePolicy represents resource resize policy for the container.

Type

object

Required

- **resourceName**

- **restartPolicy**

Property	Type	Description
resourceName	string	Name of the resource to which this resource resize policy applies. Supported values: cpu, memory.
restartPolicy	string	Restart policy to apply when specified resource is resized. If not specified, it defaults to NotRequired.

8.1.149. .spec.containers[].resources

Description

Compute Resources required by this container. Cannot be updated. More info: <https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/>

Type

object

Property	Type	Description
claims	array	Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate. This field is immutable. It can only be set for containers.
claims[]	object	ResourceClaim references one entry in PodSpec.ResourceClaims.
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Property	Type	Description
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

8.1.150. .spec.containers[].resources.claims

Description

Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate.

This field is immutable. It can only be set for containers.

Type

array

8.1.151. .spec.containers[].resources.claims[]

Description

ResourceClaim references one entry in PodSpec.ResourceClaims.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name must match the name of one entry in pod.spec.resourceClaims of the Pod where this field is used. It makes that resource available inside a container.

Property	Type	Description
request	string	Request is the name chosen for a request in the referenced claim. If empty, everything from the claim is made available, otherwise only the result of this request.

8.1.152. .spec.containers[].securityContext

Description

SecurityContext defines the security options the container should be run with. If set, the fields of SecurityContext override the equivalent fields of PodSecurityContext. More info:

<https://kubernetes.io/docs/tasks/configure-pod-container/security-context/>

Type

object

Property	Type	Description
allowPrivilegeEscalation	boolean	AllowPrivilegeEscalation controls whether a process can gain more privileges than its parent process. This bool directly controls if the no_new_privs flag will be set on the container process. AllowPrivilegeEscalation is true always when the container is: 1) run as Privileged 2) has CAP_SYS_ADMIN Note that this field cannot be set when spec.os.name is windows.
appArmorProfile	object	appArmorProfile is the AppArmor options to use by this container. If set, this profile overrides the pod's appArmorProfile. Note that this field cannot be set when spec.os.name is windows.
capabilities	object	The capabilities to add/drop when running containers. Defaults to the default set of capabilities granted by the container runtime. Note that this field cannot be set when spec.os.name is windows.

Property	Type	Description
privileged	boolean	Run container in privileged mode. Processes in privileged containers are essentially equivalent to root on the host. Defaults to false. Note that this field cannot be set when spec.os.name is windows.
procMount	string	procMount denotes the type of proc mount to use for the containers. The default value is Default which uses the container runtime defaults for readonly paths and masked paths. This requires the ProcMountType feature flag to be enabled. Note that this field cannot be set when spec.os.name is windows.
readOnlyRootFilesystem	boolean	Whether this container has a read-only root filesystem. Default is false. Note that this field cannot be set when spec.os.name is windows.
runAsGroup	integer	The GID to run the entrypoint of the container process. Uses runtime default if unset. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.
runAsNonRoot	boolean	Indicates that the container must run as a non-root user. If true, the Kubelet will validate the image at runtime to ensure that it does not run as UID 0 (root) and fail to start the container if it does. If unset or false, no such validation will be performed. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.

Property	Type	Description
runAsUser	integer	The UID to run the entrypoint of the container process. Defaults to user specified in image metadata if unspecified. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.
seLinuxOptions	object	The SELinux context to be applied to the container. If unspecified, the container runtime will allocate a random SELinux context for each container. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.
seccompProfile	object	The seccomp options to use by this container. If seccomp options are provided at both the pod & container level, the container options override the pod options. Note that this field cannot be set when spec.os.name is windows.
windowsOptions	object	The Windows specific settings applied to all containers. If unspecified, the options from the PodSecurityContext will be used. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is linux.

8.1.153. .spec.containers[].securityContext.appArmorProfile

Description

appArmorProfile is the AppArmor options to use by this container. If set, this profile overrides the pod's appArmorProfile. Note that this field cannot be set when spec.os.name is windows.

Type**object****Required**

- **type**

Property	Type	Description
localhostProfile	string	localhostProfile indicates a profile loaded on the node that should be used. The profile must be preconfigured on the node to work. Must match the loaded name of the profile. Must be set if and only if type is "Localhost".
type	string	type indicates which kind of AppArmor profile will be applied. Valid options are: Localhost - a profile pre-loaded on the node. RuntimeDefault - the container runtime's default profile. Unconfined - no AppArmor enforcement.

8.1.154. .spec.containers[].securityContext.capabilities

Description

The capabilities to add/drop when running containers. Defaults to the default set of capabilities granted by the container runtime. Note that this field cannot be set when spec.os.name is windows.

Type**object**

Property	Type	Description
add	array (string)	Added capabilities
drop	array (string)	Removed capabilities

8.1.155. .spec.containers[].securityContext.seLinuxOptions

Description

The SELinux context to be applied to the container. If unspecified, the container runtime will allocate a random SELinux context for each container. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.

Type

object

Property	Type	Description
level	string	Level is SELinux level label that applies to the container.
role	string	Role is a SELinux role label that applies to the container.
type	string	Type is a SELinux type label that applies to the container.
user	string	User is a SELinux user label that applies to the container.

8.1.156. .spec.containers[].securityContext.seccompProfile**Description**

The seccomp options to use by this container. If seccomp options are provided at both the pod & container level, the container options override the pod options. Note that this field cannot be set when spec.os.name is windows.

Type**object****Required**

- **type**

Property	Type	Description
localhostProfile	string	localhostProfile indicates a profile defined in a file on the node should be used. The profile must be preconfigured on the node to work. Must be a descending path, relative to the kubelet's configured seccomp profile location. Must be set if type is "Localhost". Must NOT be set for any other type.

Property	Type	Description
type	string	type indicates which kind of seccomp profile will be applied. Valid options are: Localhost - a profile defined in a file on the node should be used. RuntimeDefault - the container runtime default profile should be used. Unconfined - no profile should be applied.

8.1.157. .spec.containers[].securityContext.windowsOptions

Description

The Windows specific settings applied to all containers. If unspecified, the options from the PodSecurityContext will be used. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is linux.

Type

object

Property	Type	Description
gmsaCredentialSpec	string	GMSACredentialSpec is where the GMSA admission webhook (https://github.com/kubernetes-sigs/windows-gmsa) inlines the contents of the GMSA credential spec named by the <code>GMSACredentialSpecName</code> field.
gmsaCredentialSpecName	string	GMSACredentialSpecName is the name of the GMSA credential spec to use.
hostProcess	boolean	HostProcess determines if a container should be run as a 'Host Process' container. All of a Pod's containers must have the same effective HostProcess value (it is not allowed to have a mix of HostProcess containers and non-HostProcess containers). In addition, if HostProcess is true then HostNetwork must also be set to true.

Property	Type	Description
runAsUserName	string	The UserName in Windows to run the entrypoint of the container process. Defaults to the user specified in image metadata if unspecified. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.

8.1.158. .spec.containers[].startupProbe

Description

StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info:

<https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
failureThreshold	integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
grpc	object	GRPC specifies a GRPC HealthCheckRequest.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
initialDelaySeconds	integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Property	Type	Description
periodSeconds	integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	object	TCPSocket specifies a connection to a TCP port.
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully upon probe failure. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. If this value is nil, the pod's <code>terminationGracePeriodSeconds</code> will be used. Otherwise, this value overrides the value provided by the pod spec. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). This is a beta field and requires enabling <code>ProbeTerminationGracePeriod</code> feature gate. Minimum value is 1. <code>spec.terminationGracePeriodSeconds</code> is used if unset.
timeoutSeconds	integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

8.1.159. `.spec.containers[].startupProbe.exec`

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

8.1.160. .spec.containers[].startupProbe.grpc**Description**

GRPC specifies a GRPC HealthCheckRequest.

Type

object

Required

- **port**

Property	Type	Description
port	integer	Port number of the gRPC service. Number must be in the range 1 to 65535.
service	string	Service is the name of the service to place in the gRPC HealthCheckRequest (see https://github.com/grpc/grpc/blob/master/doc/health-checking.md). If this is not specified, the default behavior is defined by gRPC.

8.1.161. .spec.containers[].startupProbe.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

8.1.162. .spec.containers[].startupProbe.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

8.1.163. .spec.containers[].startupProbe.httpGet.httpHeaders[]**Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

8.1.164. .spec.containers[].startupProbe.tcpSocket**Description**

TCP socket specifies a connection to a TCP port.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

8.1.165. .spec.containers[].volumeDevices**Description**

volumeDevices is the list of block devices to be used by the container.

Type

array

8.1.166. .spec.containers[].volumeDevices[]**Description**

volumeDevice describes a mapping of a raw block device within a container.

Type

object

Required

- **devicePath**
- **name**

Property	Type	Description
devicePath	string	devicePath is the path inside of the container that the device will be mapped to.
name	string	name must match the name of a persistentVolumeClaim in the pod

8.1.167. .spec.containers[].volumeMounts

Description

Pod volumes to mount into the container's filesystem. Cannot be updated.

Type

array

8.1.168. .spec.containers[].volumeMounts[]

Description

VolumeMount describes a mounting of a Volume within a container.

Type

object

Required

- **mountPath**
- **name**

Property	Type	Description
mountPath	string	Path within the container at which the volume should be mounted. Must not contain '.'.

Property	Type	Description
mountPropagation	string	mountPropagation determines how mounts are propagated from the host to container and the other way around. When not set, MountPropagationNone is used. This field is beta in 1.10. When RecursiveReadOnly is set to IfPossible or to Enabled, MountPropagation must be None or unspecified (which defaults to None).
name	string	This must match the Name of a Volume.
readOnly	boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
recursiveReadOnly	string	RecursiveReadOnly specifies whether read-only mounts should be handled recursively. If ReadOnly is false, this field has no meaning and must be unspecified. If ReadOnly is true, and this field is set to Disabled, the mount is not made recursively read-only. If this field is set to IfPossible, the mount is made recursively read-only, if it is supported by the container runtime. If this field is set to Enabled, the mount is made recursively read-only if it is supported by the container runtime, otherwise the pod will not be started and an error will be generated to indicate the reason. If this field is set to IfPossible or Enabled, MountPropagation must be set to None (or be unspecified, which defaults to None). If this field is not specified, it is treated as an equivalent of Disabled.

Property	Type	Description
subPath	string	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root).
subPathExpr	string	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

8.1.169. .spec.dnsConfig

Description

Defines the DNS configuration for the pods.

Type

object

Property	Type	Description
nameservers	array (string)	A list of DNS name server IP addresses. This will be appended to the base nameservers generated from DNSPolicy.
options	array	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Resolution options given in Options will override those that appear in the base DNSPolicy.
options[]	object	PodDNSConfigOption defines DNS resolver options of a pod.
searches	array (string)	A list of DNS search domains for host-name lookup. This will be appended to the base search paths generated from DNSPolicy.

8.1.170. .spec.dnsConfig.options

Description

A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Resolution options given in Options will override those that appear in the base DNSPolicy.

Type

array

8.1.171. .spec.dnsConfig.options[]**Description**

PodDNSConfigOption defines DNS resolver options of a pod.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name is required and must be unique.
value	string	Value is optional.

8.1.172. .spec.excludedFromEnforcement**Description**

List of references to PodMonitor, ServiceMonitor, Probe and PrometheusRule objects to be excluded from enforcing a namespace label of origin.
It is only applicable if **spec.enforcedNamespaceLabel** set to true.

Type

array

8.1.173. .spec.excludedFromEnforcement[]**Description**

ObjectReference references a PodMonitor, ServiceMonitor, Probe or PrometheusRule object.

Type

object

Required

- **namespace**
- **resource**

Property	Type	Description
group	string	Group of the referent. When not specified, it defaults to monitoring.coreos.com
name	string	Name of the referent. When not set, all resources in the namespace are matched.
namespace	string	Namespace of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces/
resource	string	Resource of the referent.

8.1.174. .spec.exemplars

Description

Exemplars related settings that are runtime reloadable. It requires to enable the **exemplar-storage** feature flag to be effective.

Type

object

Property	Type	Description
maxSize	integer	Maximum number of exemplars stored in memory for all series. exemplar-storage itself must be enabled using the spec.enableFeature option for exemplars to be scraped in the first place. If not set, Prometheus uses its default value. A value of zero or less than zero disables the storage.

8.1.175. .spec.hostAliases

Description

Optional list of hosts and IPs that will be injected into the Pod's hosts file if specified.

Type

array

8.1.176. .spec.hostAliases[]

Description

HostAlias holds the mapping between IP and hostnames that will be injected as an entry in the pod's hosts file.

Type

object

Required

- **hostnames**
- **ip**

Property	Type	Description
hostnames	array (string)	Hostnames for the above IP address.
ip	string	IP address of the host file entry.

8.1.177. .spec.imagePullSecrets

Description

An optional list of references to Secrets in the same namespace to use for pulling images from registries. See <http://kubernetes.io/docs/user-guide/images#specifying-imagepullsecrets-on-a-pod>

Type

array

8.1.178. .spec.imagePullSecrets[]

Description

LocalObjectReference contains enough information to let you locate the referenced object inside the same namespace.

Type

object

Property	Type	Description

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

8.1.179. .spec.initContainers

Description

InitContainers allows injecting initContainers to the Pod definition. Those can be used to e.g. fetch secrets for injection into the Prometheus configuration from external sources. Any errors during the execution of an initContainer will lead to a restart of the Pod. More info: <https://kubernetes.io/docs/concepts/workloads/pods/init-containers/> InitContainers described here modify an operator generated init containers if they share the same name and modifications are done via a strategic merge patch.

The names of init container name managed by the operator are: * **init-config-reloader**.

Overriding init containers is entirely outside the scope of what the maintainers will support and by doing so, you accept that this behaviour may break at any time without notice.

Type

array

8.1.180. .spec.initContainers[]

Description

A single application container that you want to run within a pod.

Type

object

Required

- **name**

Property	Type	Description

Property	Type	Description
args	array (string)	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references <code>\$(VAR_NAME)</code> are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double are reduced to a single <code>\$</code>, which allows for escaping the <code>\$(VAR_NAME)</code> syntax: i.e. "<code>\$(VAR_NAME)</code>" will produce the string literal <code>"\$(VAR_NAME)"</code>. Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
command	array (string)	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references <code>\$(VAR_NAME)</code> are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double are reduced to a single <code>\$</code>, which allows for escaping the <code>\$(VAR_NAME)</code> syntax: i.e. "<code>\$(VAR_NAME)</code>" will produce the string literal <code>"\$(VAR_NAME)"</code>. Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	array	List of environment variables to set in the container. Cannot be updated.

Property	Type	Description
env[]	object	EnvVar represents an environment variable present in a Container.
envFrom	array	List of sources to populate environment variables in the container. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.
envFrom[]	object	EnvFromSource represents the source of a set of ConfigMaps or Secrets
image	string	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
imagePullPolicy	string	Image pull policy. One of Always, Never, IfNotPresent. Defaults to Always if :latest tag is specified, or IfNotPresent otherwise. Cannot be updated. More info: https://kubernetes.io/docs/concepts/containers/images#updating-images
lifecycle	object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.

Property	Type	Description
livenessProbe	object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	string	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	array	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
ports[]	object	ContainerPort represents a network port in a single container.
readinessProbe	object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
resizePolicy	array	Resources resize policy for the container.
resizePolicy[]	object	ContainerResizePolicy represents resource resize policy for the container.

Property	Type	Description
resources	object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
restartPolicy	string	RestartPolicy defines the restart behavior of individual containers in a pod. This field may only be set for init containers, and the only allowed value is "Always". For non-init containers or when this field is not specified, the restart behavior is defined by the Pod's restart policy and the container type. Setting the RestartPolicy as "Always" for the init container will have the following effect: this init container will be continually restarted on exit until all regular containers have terminated. Once all regular containers have completed, all init containers with restartPolicy "Always" will be shut down. This lifecycle differs from normal init containers and is often referred to as a "sidecar" container. Although this init container still starts in the init container sequence, it does not wait for the container to complete before proceeding to the next init container. Instead, the next init container starts immediately after this init container is started, or after any startupProbe has successfully completed.
securityContext	object	SecurityContext defines the security options the container should be run with. If set, the fields of SecurityContext override the equivalent fields of PodSecurityContext. More info: https://kubernetes.io/docs/tasks/configure-pod-container/security-context/

Property	Type	Description
startupProbe	object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
stdinOnce	boolean	Whether the container runtime should close the stdin channel after it has been opened by a single attach. When stdin is true the stdin stream will remain open across multiple attach sessions. If stdinOnce is set to true, stdin is opened on container start, is empty until the first client attaches to stdin, and then remains open and accepts data until the client disconnects, at which time stdin is closed and remains closed until the container is restarted. If this flag is false, a container processes that reads from stdin will never receive an EOF. Default is false

Property	Type	Description
terminationMessagePath	string	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.
terminationMessagePolicy	string	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated.
tty	boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeDevices	array	volumeDevices is the list of block devices to be used by the container.
volumeDevices[]	object	volumeDevice describes a mapping of a raw block device within a container.
volumeMounts	array	Pod volumes to mount into the container's filesystem. Cannot be updated.

Property	Type	Description
volumeMounts[]	object	VolumeMount describes a mounting of a Volume within a container.
workingDir	string	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated.

8.1.181. .spec.initContainers[].env

Description

List of environment variables to set in the container. Cannot be updated.

Type

array

8.1.182. .spec.initContainers[].env[]

Description

EnvVar represents an environment variable present in a Container.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name of the environment variable. Must be a C_IDENTIFIER.

Property	Type	Description
value	string	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	object	Source for the environment variable's value. Cannot be used if value is not empty.

8.1.183. .spec.initContainers[].env[].valueFrom

Description

Source for the environment variable's value. Cannot be used if value is not empty.

Type

object

Property	Type	Description
configMapKeyRef	object	Selects a key of a ConfigMap.
fieldRef	object	Selects a field of the pod: supports metadata.name, metadata.namespace, metadata.labels['<KEY>'], metadata.annotations['<KEY>'], spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.

Property	Type	Description
resourceFieldRef	object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, limits.ephemeral-storage, requests.cpu, requests.memory and requests.ephemeral-storage) are currently supported.
secretKeyRef	object	Selects a key of a secret in the pod's namespace

8.1.184. .spec.initContainers[].env[].valueFrom.configMapKeyRef

Description

Selects a key of a ConfigMap.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.185. .spec.initContainers[].env[].valueFrom.fieldRef

Description

Selects a field of the pod: supports metadata.name, metadata.namespace, **metadata.labels['<KEY>']**, **metadata.annotations['<KEY>']**, spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.

Type**object****Required**

- **fieldPath**

Property	Type	Description
apiVersion	string	Version of the schema the FieldPath is written in terms of, defaults to "v1".
fieldPath	string	Path of the field to select in the specified API version.

8.1.186. .spec.initContainers[].env[].valueFrom.resourceFieldRef

Description

Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, limits.ephemeral-storage, requests.cpu, requests.memory and requests.ephemeral-storage) are currently supported.

Type**object****Required**

- **resource**

Property	Type	Description
containerName	string	Container name: required for volumes, optional for env vars
divisor	integer-or-string	Specifies the output format of the exposed resources, defaults to "1"
resource	string	Required: resource to select

8.1.187. .spec.initContainers[].env[].valueFrom.secretKeyRef

Description

Selects a key of a secret in the pod's namespace

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.188. .spec.initContainers[].envFrom

Description

List of sources to populate environment variables in the container. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Type

array

8.1.189. .spec.initContainers[].envFrom[]

Description

EnvFromSource represents the source of a set of ConfigMaps or Secrets

Type

object

Property	Type	Description
configMapRef	object	The ConfigMap to select from
prefix	string	Optional text to prepend to the name of each environment variable. Must be a C_IDENTIFIER.
secretRef	object	The Secret to select from

8.1.190. .spec.initContainers[].envFrom[].configMapRef

Description

The ConfigMap to select from

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap must be defined

8.1.191. .spec.initContainers[].envFrom[].secretRef

Description

The Secret to select from

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret must be defined

8.1.192. .spec.initContainers[].lifecycle

Description

Actions that the management system should take in response to container lifecycle events. Cannot be updated.

Type
object

Property	Type	Description
postStart	object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
stopSignal	string	StopSignal defines which signal will be sent to a container when it is being stopped. If not specified, the default is defined by the container runtime in use. StopSignal can only be set for Pods with a non-empty .spec.os.name

8.1.193. .spec.initContainers[].lifecycle.postStart

Description

PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: <https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
sleep	object	Sleep represents a duration that the container should sleep.
tcpSocket	object	Deprecated. TCPSocket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

8.1.194. .spec.initContainers[].lifecycle.postStart.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

8.1.195. .spec.initContainers[].lifecycle.postStart.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.

Property	Type	Description
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

8.1.196. .spec.initContainers[].lifecycle.postStart.httpGet.httpHeaders

Description

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

8.1.197. .spec.initContainers[].lifecycle.postStart.httpGet.httpHeaders[]

Description

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

8.1.198. .spec.initContainers[].lifecycle.postStart.sleep

Description

Sleep represents a duration that the container should sleep.

Type

object

Required

- **seconds**

Property	Type	Description
seconds	integer	Seconds is the number of seconds to sleep.

8.1.199. .spec.initContainers[].lifecycle.postStart.tcpSocket**Description**

Deprecated. TCP Socket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

8.1.200. .spec.initContainers[].lifecycle.preStop**Description**

PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: <https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
sleep	object	Sleep represents a duration that the container should sleep.
tcpSocket	object	Deprecated. TCPSocket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

8.1.201. .spec.initContainers[].lifecycle.preStop.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

8.1.202. .spec.initContainers[].lifecycle.preStop.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

8.1.203. .spec.initContainers[].lifecycle.preStop.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

8.1.204. .spec.initContainers[].lifecycle.preStop.httpGet.httpHeaders[]**Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

8.1.205. .spec.initContainers[].lifecycle.preStop.sleep

Description

Sleep represents a duration that the container should sleep.

Type

object

Required

- **seconds**

Property	Type	Description
seconds	integer	Seconds is the number of seconds to sleep.

8.1.206. .spec.initContainers[].lifecycle.preStop.tcpSocket

Description

Deprecated. TCP Socket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.

Property	Type	Description
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

8.1.207. .spec.initContainers[].livenessProbe

Description

Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: <https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
failureThreshold	integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
grpc	object	GRPC specifies a GRPC HealthCheckRequest.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
initialDelaySeconds	integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.

Property	Type	Description
successThreshold	integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	object	TCPSocket specifies a connection to a TCP port.
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully upon probe failure. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. If this value is nil, the pod's terminationGracePeriodSeconds will be used. Otherwise, this value overrides the value provided by the pod spec. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). This is a beta field and requires enabling ProbeTerminationGracePeriod feature gate. Minimum value is 1. spec.terminationGracePeriodSeconds is used if unset.
timeoutSeconds	integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

8.1.208. .spec.initContainers[].livenessProbe.exec

Description

Exec specifies a command to execute in the container.

Type
object

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

8.1.209. .spec.initContainers[].livenessProbe.grpc

Description

GRPC specifies a GRPC HealthCheckRequest.

Type
object

Required

- **port**

Property	Type	Description
port	integer	Port number of the gRPC service. Number must be in the range 1 to 65535.
service	string	Service is the name of the service to place in the gRPC HealthCheckRequest (see https://github.com/grpc/grpc/blob/master/doc/health-checking.md). If this is not specified, the default behavior is defined by gRPC.

8.1.210. .spec.initContainers[].livenessProbe.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type**object****Required**

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

8.1.211. .spec.initContainers[].livenessProbe.httpGet.httpHeaders

Description

Custom headers to set in the request. HTTP allows repeated headers.

Type**array**

8.1.212. .spec.initContainers[].livenessProbe.httpGet.httpHeaders[]

Description

HTTPHeader describes a custom header to be used in HTTP probes

Type**object****Required**

- **name**

- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

8.1.213. .spec.initContainers[].livenessProbe.tcpSocket

Description

TCPSocket specifies a connection to a TCP port.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

8.1.214. .spec.initContainers[].ports

Description

List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See <https://github.com/kubernetes/kubernetes/issues/108255>. Cannot be updated.

Type

array

8.1.215. .spec.initContainers[].ports[]

Description

ContainerPort represents a network port in a single container.

Type

object

Required

- **containerPort**

Property	Type	Description
containerPort	integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
hostIP	string	What host IP to bind the external port to.
hostPort	integer	Number of port to expose on the host. If specified, this must be a valid port number, $0 < x < 65536$. If HostNetwork is specified, this must match ContainerPort. Most containers do not need this.
name	string	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services.
protocol	string	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP".

8.1.216. .spec.initContainers[].readinessProbe

Description

Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info:

<https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.

Property	Type	Description
failureThreshold	integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
grpc	object	GRPC specifies a GRPC HealthCheckRequest.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
initialDelaySeconds	integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	object	TCPSocket specifies a connection to a TCP port.

Property	Type	Description
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully upon probe failure. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. If this value is nil, the pod's terminationGracePeriodSeconds will be used. Otherwise, this value overrides the value provided by the pod spec. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). This is a beta field and requires enabling ProbeTerminationGracePeriod feature gate. Minimum value is 1. spec.terminationGracePeriodSeconds is used if unset.
timeoutSeconds	integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

8.1.217. .spec.initContainers[].readinessProbe.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

8.1.218. .spec.initContainers[].readinessProbe.grpc

Description

GRPC specifies a GRPC HealthCheckRequest.

Type

object

Required

- **port**

Property	Type	Description
port	integer	Port number of the gRPC service. Number must be in the range 1 to 65535.
service	string	Service is the name of the service to place in the gRPC HealthCheckRequest (see https://github.com/grpc/grpc/blob/master/doc/health-checking.md). If this is not specified, the default behavior is defined by gRPC.

8.1.219. .spec.initContainers[].readinessProbe.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

8.1.220. .spec.initContainers[].readinessProbe.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

8.1.221. .spec.initContainers[].readinessProbe.httpGet.httpHeaders[]**Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

8.1.222. .spec.initContainers[].readinessProbe.tcpSocket

Description

TCP socket specifies a connection to a TCP port.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

8.1.223. .spec.initContainers[].resizePolicy

Description

Resources resize policy for the container.

Type

array

8.1.224. .spec.initContainers[].resizePolicy[]

Description

ContainerResizePolicy represents resource resize policy for the container.

Type

object

Required

- **resourceName**

- **restartPolicy**

Property	Type	Description
resourceName	string	Name of the resource to which this resource resize policy applies. Supported values: cpu, memory.
restartPolicy	string	Restart policy to apply when specified resource is resized. If not specified, it defaults to NotRequired.

8.1.225. .spec.initContainers[].resources

Description

Compute Resources required by this container. Cannot be updated. More info:

<https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/>

Type

object

Property	Type	Description
claims	array	Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate. This field is immutable. It can only be set for containers.
claims[]	object	ResourceClaim references one entry in PodSpec.ResourceClaims.
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Property	Type	Description
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

8.1.226. .spec.initContainers[].resources.claims

Description

Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate.

This field is immutable. It can only be set for containers.

Type

array

8.1.227. .spec.initContainers[].resources.claims[]

Description

ResourceClaim references one entry in PodSpec.ResourceClaims.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name must match the name of one entry in pod.spec.resourceClaims of the Pod where this field is used. It makes that resource available inside a container.

Property	Type	Description
request	string	Request is the name chosen for a request in the referenced claim. If empty, everything from the claim is made available, otherwise only the result of this request.

8.1.228. .spec.initContainers[].securityContext

Description

SecurityContext defines the security options the container should be run with. If set, the fields of SecurityContext override the equivalent fields of PodSecurityContext. More info:

<https://kubernetes.io/docs/tasks/configure-pod-container/security-context/>

Type

object

Property	Type	Description
allowPrivilegeEscalation	boolean	AllowPrivilegeEscalation controls whether a process can gain more privileges than its parent process. This bool directly controls if the no_new_privs flag will be set on the container process. AllowPrivilegeEscalation is true always when the container is: 1) run as Privileged 2) has CAP_SYS_ADMIN Note that this field cannot be set when spec.os.name is windows.
appArmorProfile	object	appArmorProfile is the AppArmor options to use by this container. If set, this profile overrides the pod's appArmorProfile. Note that this field cannot be set when spec.os.name is windows.
capabilities	object	The capabilities to add/drop when running containers. Defaults to the default set of capabilities granted by the container runtime. Note that this field cannot be set when spec.os.name is windows.

Property	Type	Description
privileged	boolean	Run container in privileged mode. Processes in privileged containers are essentially equivalent to root on the host. Defaults to false. Note that this field cannot be set when spec.os.name is windows.
procMount	string	procMount denotes the type of proc mount to use for the containers. The default value is Default which uses the container runtime defaults for readonly paths and masked paths. This requires the ProcMountType feature flag to be enabled. Note that this field cannot be set when spec.os.name is windows.
readOnlyRootFilesystem	boolean	Whether this container has a read-only root filesystem. Default is false. Note that this field cannot be set when spec.os.name is windows.
runAsGroup	integer	The GID to run the entrypoint of the container process. Uses runtime default if unset. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.
runAsNonRoot	boolean	Indicates that the container must run as a non-root user. If true, the Kubelet will validate the image at runtime to ensure that it does not run as UID 0 (root) and fail to start the container if it does. If unset or false, no such validation will be performed. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.

Property	Type	Description
runAsUser	integer	The UID to run the entrypoint of the container process. Defaults to user specified in image metadata if unspecified. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.
seLinuxOptions	object	The SELinux context to be applied to the container. If unspecified, the container runtime will allocate a random SELinux context for each container. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.
seccompProfile	object	The seccomp options to use by this container. If seccomp options are provided at both the pod & container level, the container options override the pod options. Note that this field cannot be set when spec.os.name is windows.
windowsOptions	object	The Windows specific settings applied to all containers. If unspecified, the options from the PodSecurityContext will be used. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is linux.

8.1.229. .spec.initContainers[].securityContext.appArmorProfile

Description

appArmorProfile is the AppArmor options to use by this container. If set, this profile overrides the pod's appArmorProfile. Note that this field cannot be set when spec.os.name is windows.

Type**object****Required**

- **type**

Property	Type	Description
localhostProfile	string	localhostProfile indicates a profile loaded on the node that should be used. The profile must be preconfigured on the node to work. Must match the loaded name of the profile. Must be set if and only if type is "Localhost".
type	string	type indicates which kind of AppArmor profile will be applied. Valid options are: Localhost - a profile pre-loaded on the node. RuntimeDefault - the container runtime's default profile. Unconfined - no AppArmor enforcement.

8.1.230. .spec.initContainers[].securityContext.capabilities**Description**

The capabilities to add/drop when running containers. Defaults to the default set of capabilities granted by the container runtime. Note that this field cannot be set when spec.os.name is windows.

Type**object**

Property	Type	Description
add	array (string)	Added capabilities
drop	array (string)	Removed capabilities

8.1.231. .spec.initContainers[].securityContext.seLinuxOptions**Description**

The SELinux context to be applied to the container. If unspecified, the container runtime will allocate a random SELinux context for each container. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.

Type

object

Property	Type	Description
level	string	Level is SELinux level label that applies to the container.
role	string	Role is a SELinux role label that applies to the container.
type	string	Type is a SELinux type label that applies to the container.
user	string	User is a SELinux user label that applies to the container.

8.1.232. .spec.initContainers[].securityContext.seccompProfile**Description**

The seccomp options to use by this container. If seccomp options are provided at both the pod & container level, the container options override the pod options. Note that this field cannot be set when spec.os.name is windows.

Type**object****Required**

- **type**

Property	Type	Description
localhostProfile	string	localhostProfile indicates a profile defined in a file on the node should be used. The profile must be preconfigured on the node to work. Must be a descending path, relative to the kubelet's configured seccomp profile location. Must be set if type is "Localhost". Must NOT be set for any other type.

Property	Type	Description
type	string	type indicates which kind of seccomp profile will be applied. Valid options are: Localhost - a profile defined in a file on the node should be used. RuntimeDefault - the container runtime default profile should be used. Unconfined - no profile should be applied.

8.1.233. .spec.initContainers[].securityContext.windowsOptions

Description

The Windows specific settings applied to all containers. If unspecified, the options from the PodSecurityContext will be used. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is linux.

Type

object

Property	Type	Description
gmsaCredentialSpec	string	GMSACredentialSpec is where the GMSA admission webhook (https://github.com/kubernetes-sigs/windows-gmsa) inlines the contents of the GMSA credential spec named by the <code>GMSACredentialSpecName</code> field.
gmsaCredentialSpecName	string	GMSACredentialSpecName is the name of the GMSA credential spec to use.
hostProcess	boolean	HostProcess determines if a container should be run as a 'Host Process' container. All of a Pod's containers must have the same effective HostProcess value (it is not allowed to have a mix of HostProcess containers and non-HostProcess containers). In addition, if HostProcess is true then HostNetwork must also be set to true.

Property	Type	Description
runAsUserName	string	The UserName in Windows to run the entrypoint of the container process. Defaults to the user specified in image metadata if unspecified. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.

8.1.234. .spec.initContainers[].startupProbe

Description

StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info:

<https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
failureThreshold	integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
grpc	object	GRPC specifies a GRPC HealthCheckRequest.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
initialDelaySeconds	integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Property	Type	Description
periodSeconds	integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	object	TCPSocket specifies a connection to a TCP port.
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully upon probe failure. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. If this value is nil, the pod's <code>terminationGracePeriodSeconds</code> will be used. Otherwise, this value overrides the value provided by the pod spec. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). This is a beta field and requires enabling <code>ProbeTerminationGracePeriod</code> feature gate. Minimum value is 1. <code>spec.terminationGracePeriodSeconds</code> is used if unset.
timeoutSeconds	integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

8.1.235. `.spec.initContainers[].startupProbe.exec`

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

8.1.236. .spec.initContainers[].startupProbe.grpc**Description**

GRPC specifies a GRPC HealthCheckRequest.

Type

object

Required

- **port**

Property	Type	Description
port	integer	Port number of the gRPC service. Number must be in the range 1 to 65535.
service	string	Service is the name of the service to place in the gRPC HealthCheckRequest (see https://github.com/grpc/grpc/blob/master/doc/health-checking.md). If this is not specified, the default behavior is defined by gRPC.

8.1.237. .spec.initContainers[].startupProbe.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

8.1.238. .spec.initContainers[].startupProbe.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

8.1.239. .spec.initContainers[].startupProbe.httpGet.httpHeaders[]**Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

8.1.240. .spec.initContainers[].startupProbe.tcpSocket**Description**

TCP socket specifies a connection to a TCP port.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

8.1.241. .spec.initContainers[].volumeDevices**Description**

volumeDevices is the list of block devices to be used by the container.

Type

array

8.1.242. .spec.initContainers[].volumeDevices[]**Description**

volumeDevice describes a mapping of a raw block device within a container.

Type

object

Required

- **devicePath**
- **name**

Property	Type	Description
devicePath	string	devicePath is the path inside of the container that the device will be mapped to.
name	string	name must match the name of a persistentVolumeClaim in the pod

8.1.243. .spec.initContainers[].volumeMounts

Description

Pod volumes to mount into the container's filesystem. Cannot be updated.

Type

array

8.1.244. .spec.initContainers[].volumeMounts[]

Description

VolumeMount describes a mounting of a Volume within a container.

Type

object

Required

- **mountPath**
- **name**

Property	Type	Description
mountPath	string	Path within the container at which the volume should be mounted. Must not contain '.'.

Property	Type	Description
mountPropagation	string	mountPropagation determines how mounts are propagated from the host to container and the other way around. When not set, MountPropagationNone is used. This field is beta in 1.10. When RecursiveReadOnly is set to IfPossible or to Enabled, MountPropagation must be None or unspecified (which defaults to None).
name	string	This must match the Name of a Volume.
readOnly	boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
recursiveReadOnly	string	RecursiveReadOnly specifies whether read-only mounts should be handled recursively. If ReadOnly is false, this field has no meaning and must be unspecified. If ReadOnly is true, and this field is set to Disabled, the mount is not made recursively read-only. If this field is set to IfPossible, the mount is made recursively read-only, if it is supported by the container runtime. If this field is set to Enabled, the mount is made recursively read-only if it is supported by the container runtime, otherwise the pod will not be started and an error will be generated to indicate the reason. If this field is set to IfPossible or Enabled, MountPropagation must be set to None (or be unspecified, which defaults to None). If this field is not specified, it is treated as an equivalent of Disabled.

Property	Type	Description
subPath	string	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root).
subPathExpr	string	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

8.1.245. .spec.otlp

Description

Settings related to the OTLP receiver feature. It requires Prometheus $\geq$ v2.55.0.

Type

object

Property	Type	Description
convertHistogramsToNHCB	boolean	Configures optional translation of OTLP explicit bucket histograms into native histograms with custom buckets. It requires Prometheus $\geq$ v3.4.0.
ignoreResourceAttributes	array (string)	List of OpenTelemetry resource attributes to ignore when promoteAllResourceAttributes is true. It requires promoteAllResourceAttributes to be true. It requires Prometheus $\geq$ v3.5.0.

Property	Type	Description
keepIdentifyingResourceAttributes	boolean	Enables adding service.name , service.namespace and service.instance.id resource attributes to the target_info metric, on top of converting them into the instance and job labels. It requires Prometheus >= v3.1.0.
promoteAllResourceAttributes	boolean	Promote all resource attributes to metric labels except the ones defined in ignoreResourceAttributes . Cannot be true when promoteResourceAttributes is defined. It requires Prometheus >= v3.5.0.
promoteResourceAttributes	array (string)	List of OpenTelemetry Attributes that should be promoted to metric labels, defaults to none. Cannot be defined when promoteAllResourceAttributes is true.
translationStrategy	string	Configures how the OTLP receiver endpoint translates the incoming metrics. It requires Prometheus >= v3.0.0.

8.1.246. .spec.persistentVolumeClaimRetentionPolicy

Description

The field controls if and how PVCs are deleted during the lifecycle of a StatefulSet. The default behavior is all PVCs are retained. This is an alpha field from kubernetes 1.23 until 1.26 and a beta field from 1.26. It requires enabling the StatefulSetAutoDeletePVC feature gate.

Type

object

Property	Type	Description

Property	Type	Description
whenDeleted	string	WhenDeleted specifies what happens to PVCs created from StatefulSet VolumeClaimTemplates when the StatefulSet is deleted. The default policy of Retain causes PVCs to not be affected by StatefulSet deletion. The Delete policy causes those PVCs to be deleted.
whenScaled	string	WhenScaled specifies what happens to PVCs created from StatefulSet VolumeClaimTemplates when the StatefulSet is scaled down. The default policy of Retain causes PVCs to not be affected by a scaledown. The Delete policy causes the associated PVCs for any excess pods above the replica count to be deleted.

8.1.247. .spec.podMetadata

Description

PodMetadata configures labels and annotations which are propagated to the Prometheus pods. The following items are reserved and cannot be overridden: * "prometheus" label, set to the name of the Prometheus object. * "app.kubernetes.io/instance" label, set to the name of the Prometheus object. * "app.kubernetes.io/managed-by" label, set to "prometheus-operator". * "app.kubernetes.io/name" label, set to "prometheus". * "app.kubernetes.io/version" label, set to the Prometheus version. * "operator.prometheus.io/name" label, set to the name of the Prometheus object. * "operator.prometheus.io/shard" label, set to the shard number of the Prometheus object. * "kubectl.kubernetes.io/default-container" annotation, set to "prometheus".

Type

object

Property	Type	Description

Property	Type	Description
annotations	object (string)	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations/
labels	object (string)	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/
name	string	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/

8.1.248. .spec.podMonitorNamespaceSelector

Description

Namespaces to match for PodMonitors discovery. An empty label selector matches all namespaces. A null label selector (default value) matches the current namespace only.

Type

object

Property	Type	Description

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.249. .spec.podMonitorNamespaceSelector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.250. .spec.podMonitorNamespaceSelector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.

Property	Type	Description
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.251. .spec.podMonitorSelector

Description

PodMonitors to be selected for target discovery. An empty label selector matches all objects. A null label selector matches no objects.

If **spec.serviceMonitorSelector**, **spec.podMonitorSelector**, **spec.probeSelector** and **spec.scrapeConfigSelector** are null, the Prometheus configuration is unmanaged. The Prometheus operator will ensure that the Prometheus configuration's Secret exists, but it is the responsibility of the user to provide the raw gzipped Prometheus configuration under the **prometheus.yaml.gz** key. This behavior is **deprecated** and will be removed in the next major version of the custom resource definition. It is recommended to use **spec.additionalScrapeConfigs** instead.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Property	Type	Description
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.252. .spec.podMonitorSelector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.253. .spec.podMonitorSelector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.254. .spec.probeNamespaceSelector

Description

Namespaces to match for Probe discovery. An empty label selector matches all namespaces. A null label selector matches the current namespace only.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.255. .spec.probeNamespaceSelector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.256. .spec.probeNamespaceSelector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.257. .spec.probeSelector

Description

Probes to be selected for target discovery. An empty label selector matches all objects. A null label selector matches no objects.

If **spec.serviceMonitorSelector**, **spec.podMonitorSelector**, **spec.probeSelector** and **spec.scrapeConfigSelector** are null, the Prometheus configuration is unmanaged. The Prometheus operator will ensure that the Prometheus configuration's Secret exists, but it is the responsibility of the user to provide the raw gzipped Prometheus configuration under the **prometheus.yaml.gz** key. This behavior is **deprecated** and will be removed in the next major version of the custom resource definition. It is recommended to use **spec.additionalScrapeConfigs** instead.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.258. .spec.probeSelector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.259. .spec.probeSelector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.

Property	Type	Description
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.260. .spec.prometheusRulesExcludedFromEnforce

Description

Defines the list of PrometheusRule objects to which the namespace label enforcement doesn't apply. This is only relevant when **spec.enforcedNamespaceLabel** is set to true. Deprecated: use **spec.excludedFromEnforcement** instead.

Type

array

8.1.261. .spec.prometheusRulesExcludedFromEnforce[]

Description

PrometheusRuleExcludeConfig enables users to configure excluded PrometheusRule names and their namespaces to be ignored while enforcing namespace label for alerts and metrics.

Type

object

Required

- **ruleName**
- **ruleNamespace**

Property	Type	Description
ruleName	string	Name of the excluded PrometheusRule object.
ruleNamespace	string	Namespace of the excluded PrometheusRule object.

8.1.262. .spec.query

Description

QuerySpec defines the configuration of the Prometheus query service.

Type

object

Property	Type	Description
lookbackDelta	string	The delta difference allowed for retrieving metrics during expression evaluations.
maxConcurrency	integer	Number of concurrent queries that can be run at once.
maxSamples	integer	Maximum number of samples a single query can load into memory. Note that queries will fail if they would load more samples than this into memory, so this also limits the number of samples a query can return.
timeout	string	Maximum time a query may take before being aborted.

8.1.263. .spec.remoteRead

Description

Defines the list of remote read configurations.

Type

array

8.1.264. .spec.remoteRead[]

Description

RemoteReadSpec defines the configuration for Prometheus to read back samples from a remote endpoint.

Type

object

Required

- **url**

Property	Type	Description
authorization	object	Authorization section for the URL. It requires Prometheus $\geq$ v2.26.0. Cannot be set at the same time as basicAuth, or oauth2.
basicAuth	object	BasicAuth configuration for the URL. Cannot be set at the same time as authorization, or oauth2.
bearerToken	string	Warning: this field shouldn't be used because the token value appears in clear-text. Prefer using authorization. Deprecated: this will be removed in a future release.
bearerTokenFile	string	File from which to read the bearer token for the URL. Deprecated: this will be removed in a future release. Prefer using authorization.
filterExternalLabels	boolean	Whether to use the external labels as selectors for the remote read endpoint. It requires Prometheus $\geq$ v2.34.0.
followRedirects	boolean	Configure whether HTTP requests follow HTTP 3xx redirects. It requires Prometheus $\geq$ v2.26.0.
headers	object (string)	Custom HTTP headers to be sent along with each remote read request. Be aware that headers that are set by Prometheus itself can't be overwritten. Only valid in Prometheus versions 2.26.0 and newer.

Property	Type	Description
name	string	The name of the remote read queue, it must be unique if specified. The name is used in metrics and logging in order to differentiate read configurations. It requires Prometheus >= v2.15.0.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
oauth2	object	OAuth2 configuration for the URL. It requires Prometheus >= v2.27.0. Cannot be set at the same time as authorization, or basicAuth.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Property	Type	Description
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
readRecent	boolean	Whether reads should be made for queries for time ranges that the local storage should have complete data for.
remoteTimeout	string	Timeout for requests to the remote read endpoint.
requiredMatchers	object (string)	An optional list of equality matchers which have to be present in a selector to query the remote read endpoint.
tlsConfig	object	TLS Config to use for the URL.
url	string	The URL of the endpoint to query from.

8.1.265. .spec.remoteRead[].authorization

Description

Authorization section for the URL.
It requires Prometheus >= v2.26.0.

Cannot be set at the same time as **basicAuth**, or **oauth2**.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
credentialsFile	string	File to read a secret from, mutually exclusive with credentials .

Property	Type	Description
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

8.1.266. .spec.remoteRead[].authorization.credentials

Description

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.267. .spec.remoteRead[].basicAuth

Description

BasicAuth configuration for the URL.

Cannot be set at the same time as **authorization**, or **oauth2**.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

8.1.268. .spec.remoteRead[].basicAuth.password

Description

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.269. .spec.remoteRead[].basicAuth.username

Description

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.270. .spec.remoteRead[].oauth2

Description

OAuth2 configuration for the URL.
It requires Prometheus >= v2.27.0.

Cannot be set at the same time as **authorization**, or **basicAuth**.

Type

object

Required

- **clientId**
- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.

Property	Type	Description
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Property	Type	Description
tokenUrl	string	tokenURL configures the URL to fetch the token from.

8.1.271. .spec.remoteRead[].oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.272. .spec.remoteRead[].oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.273. .spec.remoteRead[].oauth2.clientId.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.274. .spec.remoteRead[].oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.275. .spec.remoteRead[].oauth2.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

8.1.276. .spec.remoteRead[].oauth2.proxyConnectHeader{}

Description

Type

array

8.1.277. .spec.remoteRead[].oauth2.proxyConnectHeader{[]}[]

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.278. .spec.remoteRead[].oauth2.tlsConfig

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.

Property	Type	Description
serverName	string	Used to verify the hostname for the targets.

8.1.279. .spec.remoteRead[].oauth2.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.280. .spec.remoteRead[].oauth2.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.281. .spec.remoteRead[].oauth2.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.282. .spec.remoteRead[].oauth2.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.

Property	Type	Description
secret	object	Secret containing data to use for the targets.

8.1.283. .spec.remoteRead[].oauth2.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.284. .spec.remoteRead[].oauth2.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.285. .spec.remoteRead[].oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.286. .spec.remoteRead[].proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

8.1.287. .spec.remoteRead[].proxyConnectHeader{}**Description****Type**

array

8.1.288. .spec.remoteRead[].proxyConnectHeader{}[]**Description**

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.289. .spec.remoteRead[].tlsConfig**Description**

TLS Config to use for the URL.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
caFile	string	Path to the CA cert in the Prometheus container to use for the targets.
cert	object	Client certificate to present when doing client-authentication.
certFile	string	Path to the client cert file in the Prometheus container for the targets.
insecureSkipVerify	boolean	Disable target certificate validation.
keyFile	string	Path to the client key file in the Prometheus container for the targets.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

8.1.290. .spec.remoteRead[].tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.291. .spec.remoteRead[].tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.292. .spec.remoteRead[].tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.293. .spec.remoteRead[].tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.294. .spec.remoteRead[].tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.295. .spec.remoteRead[].tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.296. .spec.remoteRead[].tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object**Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.297. .spec.remoteWrite**Description**

Defines the list of remote write configurations.

Type

array

8.1.298. .spec.remoteWrite[]**Description**

RemoteWriteSpec defines the configuration to write samples from Prometheus to a remote endpoint.

Type

object

Required

- **url**

Property	Type	Description

Property	Type	Description
authorization	object	Authorization section for the URL. It requires Prometheus >= v2.26.0 or Thanos >= v0.24.0. Cannot be set at the same time as sigv4, basicAuth, oauth2, or azureAd.
azureAd	object	AzureAD for the URL. It requires Prometheus >= v2.45.0 or Thanos >= v0.31.0. Cannot be set at the same time as authorization, basicAuth, oauth2, or sigv4.
basicAuth	object	BasicAuth configuration for the URL. Cannot be set at the same time as sigv4, authorization, oauth2, or azureAd.
bearerToken	string	Warning: this field shouldn't be used because the token value appears in clear-text. Prefer using authorization. Deprecated: this will be removed in a future release.
bearerTokenFile	string	File from which to read bearer token for the URL. Deprecated: this will be removed in a future release. Prefer using authorization.
enableHTTP2	boolean	Whether to enable HTTP2.
followRedirects	boolean	Configure whether HTTP requests follow HTTP 3xx redirects. It requires Prometheus >= v2.26.0 or Thanos >= v0.24.0.

Property	Type	Description
headers	object (string)	Custom HTTP headers to be sent along with each remote write request. Be aware that headers that are set by Prometheus itself can't be overwritten. It requires Prometheus $\geq$ v2.25.0 or Thanos $\geq$ v0.24.0.
messageVersion	string	The Remote Write message's version to use when writing to the endpoint. Version1.0 corresponds to the prometheus.WriteRequest protobuf message introduced in Remote Write 1.0. Version2.0 corresponds to the io.prometheus.write.v2.Request protobuf message introduced in Remote Write 2.0. When Version2.0 is selected, Prometheus will automatically be configured to append the metadata of scraped metrics to the WAL. Before setting this field, consult with your remote storage provider what message version it supports. It requires Prometheus $\geq$ v2.54.0 or Thanos $\geq$ v0.37.0.
metadataConfig	object	MetadataConfig configures the sending of series metadata to the remote storage.
name	string	The name of the remote write queue, it must be unique if specified. The name is used in metrics and logging in order to differentiate queues. It requires Prometheus $\geq$ v2.15.0 or Thanos $\geq$ 0.24.0.

Property	Type	Description
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
oauth2	object	OAuth2 configuration for the URL. It requires Prometheus >= v2.27.0 or Thanos >= v0.24.0. Cannot be set at the same time as sigv4, authorization, basicAuth, or azureAd.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.

Property	Type	Description
queueConfig	object	QueueConfig allows tuning of the remote write queue parameters.
remoteTimeout	string	Timeout for requests to the remote write endpoint.
roundRobinDNS	boolean	When enabled: - The remote-write mechanism will resolve the hostname via DNS. - It will randomly select one of the resolved IP addresses and connect to it. When disabled (default behavior): - The Go standard library will handle hostname resolution. - It will attempt connections to each resolved IP address sequentially. Note: The connection timeout applies to the entire resolution and connection process. If disabled, the timeout is distributed across all connection attempts. It requires Prometheus >= v3.1.0 or Thanos >= v0.38.0.
sendExemplars	boolean	Enables sending of exemplars over remote write. Note that exemplar-storage itself must be enabled using the spec.enableFeatures option for exemplars to be scraped in the first place. It requires Prometheus >= v2.27.0 or Thanos >= v0.24.0.
sendNativeHistograms	boolean	Enables sending of native histograms, also known as sparse histograms over remote write. It requires Prometheus >= v2.40.0 or Thanos >= v0.30.0.

Property	Type	Description
sigv4	object	Sigv4 allows to configures AWS's Signature Verification 4 for the URL. It requires Prometheus >= v2.26.0 or Thanos >= v0.24.0. Cannot be set at the same time as authorization, basicAuth, oauth2, or azureAd.
tlsConfig	object	TLS Config to use for the URL.
url	string	The URL of the endpoint to send samples to.
writeRelabelConfigs	array	The list of remote write relabel configurations.
writeRelabelConfigs[]	object	RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

8.1.299. .spec.remoteWrite[].authorization

Description

Authorization section for the URL.

It requires Prometheus >= v2.26.0 or Thanos >= v0.24.0.

Cannot be set at the same time as **sigv4**, **basicAuth**, **oauth2**, or **azureAd**.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.

Property	Type	Description
credentialsFile	string	File to read a secret from, mutually exclusive with credentials .
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

8.1.300. .spec.remoteWrite[].authorization.credentials

Description

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.301. .spec.remoteWrite[].azureAd

Description

AzureAD for the URL.

It requires Prometheus >= v2.45.0 or Thanos >= v0.31.0.

Cannot be set at the same time as **authorization**, **basicAuth**, **oauth2**, or **sigv4**.

Type
object

Property	Type	Description
cloud	string	The Azure Cloud. Options are 'AzurePublic', 'AzureChina', or 'AzureGovernment'.
managedIdentity	object	ManagedIdentity defines the Azure User-assigned Managed identity. Cannot be set at the same time as oauth or sdk .
oauth	object	OAuth defines the oauth config that is being used to authenticate. Cannot be set at the same time as managedIdentity or sdk . It requires Prometheus >= v2.48.0 or Thanos >= v0.31.0.
sdk	object	SDK defines the Azure SDK config that is being used to authenticate. See https://learn.microsoft.com/en-us/azure/developer/go/azure-sdk-authentication Cannot be set at the same time as oauth or managedIdentity . It requires Prometheus >= v2.52.0 or Thanos >= v0.36.0.

8.1.302. .spec.remoteWrite[].azureAd.managedIdentity

Description

ManagedIdentity defines the Azure User-assigned Managed identity. Cannot be set at the same time as **oauth** or **sdk**.

Type
object

Required

- **clientId**

Property	Type	Description
clientId	string	The client id

8.1.303. .spec.remoteWrite[].azureAd.oauth

Description

OAuth defines the oauth config that is being used to authenticate. Cannot be set at the same time as **managedIdentity** or **sdk**.

It requires Prometheus >= v2.48.0 or Thanos >= v0.31.0.

Type

object

Required

- **clientId**
- **clientSecret**
- **tenantId**

Property	Type	Description
clientId	string	clientId is the clientId of the Azure Active Directory application that is being used to authenticate.
clientSecret	object	clientSecret specifies a key of a Secret containing the client secret of the Azure Active Directory application that is being used to authenticate.
tenantId	string	tenantId is the tenant ID of the Azure Active Directory application that is being used to authenticate.

8.1.304. .spec.remoteWrite[].azureAd.oauth.clientSecret

Description

clientSecret specifies a key of a Secret containing the client secret of the Azure Active Directory application that is being used to authenticate.

Type

object

Required

- **key**

Property	Type	Description

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.305. .spec.remoteWrite[].azureAd.sdk

Description

SDK defines the Azure SDK config that is being used to authenticate. See <https://learn.microsoft.com/en-us/azure/developer/go/azure-sdk-authentication> Cannot be set at the same time as **oauth** or **managedIdentity**.

It requires Prometheus >= v2.52.0 or Thanos >= v0.36.0.

Type

object

Property	Type	Description
tenantId	string	tenantId is the tenant ID of the azure active directory application that is being used to authenticate.

8.1.306. .spec.remoteWrite[].basicAuth

Description

BasicAuth configuration for the URL.

Cannot be set at the same time as **sigv4**, **authorization**, **oauth2**, or **azureAd**.

Type

object

Property	Type	Description

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

8.1.307. .spec.remoteWrite[].basicAuth.password

Description

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.308. .spec.remoteWrite[].basicAuth.username

Description

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.309. .spec.remoteWrite[].metadataConfig**Description**

MetadataConfig configures the sending of series metadata to the remote storage.

Type

object

Property	Type	Description
maxSamplesPerSend	integer	MaxSamplesPerSend is the maximum number of metadata samples per send. It requires Prometheus >= v2.29.0.
send	boolean	Defines whether metric metadata is sent to the remote storage or not.
sendInterval	string	Defines how frequently metric metadata is sent to the remote storage.

8.1.310. .spec.remoteWrite[].oauth2**Description**

OAuth2 configuration for the URL.

It requires Prometheus $\geq$ v2.27.0 or Thanos $\geq$ v0.24.0.

Cannot be set at the same time as **sigv4**, **authorization**, **basicAuth**, or **azureAd**.

Type

object

Required

- **clientId**
- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus $\geq$ v2.43.0, Alertmanager $\geq$ v0.25.0 or Thanos $\geq$ v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus $\geq$ v2.43.0, Alertmanager $\geq$ v0.25.0 or Thanos $\geq$ v0.32.0.
proxyConnectHeader{}	array	

Property	Type	Description
proxyConnectHeader{} []	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

8.1.311. .spec.remoteWrite[].oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.312. .spec.remoteWrite[].oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.313. .spec.remoteWrite[].oauth2.clientId.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.314. .spec.remoteWrite[].oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.315. .spec.remoteWrite[].oauth2.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

8.1.316. .spec.remoteWrite[].oauth2.proxyConnectHeader{}

Description

Type

array

8.1.317. .spec.remoteWrite[].oauth2.proxyConnectHeader{[]}[]

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.318. .spec.remoteWrite[].oauth2.tlsConfig

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

8.1.319. .spec.remoteWrite[].oauth2.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.320. .spec.remoteWrite[].oauth2.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.321. .spec.remoteWrite[].oauth2.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

8.1.322. .spec.remoteWrite[].oauth2.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.323. .spec.remoteWrite[].oauth2.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.324. .spec.remoteWrite[].oauth2.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.325. .spec.remoteWrite[].oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.326. .spec.remoteWrite[].proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

8.1.327. .spec.remoteWrite[].proxyConnectHeader{}

Description

Type

array

8.1.328. .spec.remoteWrite[].proxyConnectHeader{[]}[]

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.329. .spec.remoteWrite[].queueConfig

Description

QueueConfig allows tuning of the remote write queue parameters.

Type

object

Property	Type	Description
batchSendDeadline	string	BatchSendDeadline is the maximum time a sample will wait in buffer.
capacity	integer	Capacity is the number of samples to buffer per shard before we start dropping them.
maxBackoff	string	MaxBackoff is the maximum retry delay.
maxRetries	integer	MaxRetries is the maximum number of times to retry a batch on recoverable errors.
maxSamplesPerSend	integer	MaxSamplesPerSend is the maximum number of samples per send.

Property	Type	Description
maxShards	integer	MaxShards is the maximum number of shards, i.e. amount of concurrency.
minBackoff	string	MinBackoff is the initial retry delay. Gets doubled for every retry.
minShards	integer	MinShards is the minimum number of shards, i.e. amount of concurrency.
retryOnRateLimit	boolean	Retry upon receiving a 429 status code from the remote-write storage. This is an experimental feature, it may change in any upcoming release in a breaking way.
sampleAgeLimit	string	SampleAgeLimit drops samples older than the limit. It requires Prometheus >= v2.50.0 or Thanos >= v0.32.0.

8.1.330. .spec.remoteWrite[].sigv4

Description

Sigv4 allows to configure AWS's Signature Verification 4 for the URL. It requires Prometheus >= v2.26.0 or Thanos >= v0.24.0.

Cannot be set at the same time as **authorization**, **basicAuth**, **oauth2**, or **azureAd**.

Type

object

Property	Type	Description
accessKey	object	AccessKey is the AWS API key. If not specified, the environment variable AWS_ACCESS_KEY_ID is used.

Property	Type	Description
profile	string	Profile is the named AWS profile used to authenticate.
region	string	Region is the AWS region. If blank, the region from the default credentials chain used.
roleArn	string	RoleArn is the named AWS profile used to authenticate.
secretKey	object	SecretKey is the AWS API secret. If not specified, the environment variable AWS_SECRET_ACCESS_KEY is used.

8.1.331. .spec.remoteWrite[].sigv4.accessKey

Description

AccessKey is the AWS API key. If not specified, the environment variable **AWS_ACCESS_KEY_ID** is used.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.332. .spec.remoteWrite[].sigv4.secretKey

Description

SecretKey is the AWS API secret. If not specified, the environment variable **AWS_SECRET_ACCESS_KEY** is used.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.333. .spec.remoteWrite[].tlsConfig

Description

TLS Config to use for the URL.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
caFile	string	Path to the CA cert in the Prometheus container to use for the targets.
cert	object	Client certificate to present when doing client-authentication.

Property	Type	Description
certFile	string	Path to the client cert file in the Prometheus container for the targets.
insecureSkipVerify	boolean	Disable target certificate validation.
keyFile	string	Path to the client key file in the Prometheus container for the targets.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

8.1.334. .spec.remoteWrite[].tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.335. .spec.remoteWrite[].tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.336. .spec.remoteWrite[].tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.337. .spec.remoteWrite[].tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.338. .spec.remoteWrite[].tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.339. .spec.remoteWrite[].tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.340. .spec.remoteWrite[].tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object**Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.341. .spec.remoteWrite[].writeRelabelConfigs**Description**

The list of remote write relabel configurations.

Type

array

8.1.342. .spec.remoteWrite[].writeRelabelConfigs[]**Description**

RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples.

More info:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

object

Property	Type	Description

Property	Type	Description
action	string	Action to perform based on the regex matching. Uppercase and Lowercase actions require Prometheus >= v2.36.0. DropEqual and KeepEqual actions require Prometheus >= v2.41.0. Default: "Replace"
modulus	integer	Modulus to take of the hash of the source label values. Only applicable when the action is HashMod.
regex	string	Regular expression against which the extracted value is matched.
replacement	string	Replacement value against which a Replace action is performed if the regular expression matches. Regex capture groups are available.
separator	string	Separator is the string between concatenated SourceLabels.
sourceLabels	array (string)	The source labels select values from existing labels. Their content is concatenated using the configured Separator and matched against the configured regular expression.
targetLabel	string	Label to which the resulting string is written in a replacement. It is mandatory for Replace, HashMod, Lowercase, Uppercase, KeepEqual and DropEqual actions. Regex capture groups are available.

8.1.343. .spec.resources

Description

Defines the resources requests and limits of the 'prometheus' container.

Type

object

Property	Type	Description
claims	array	Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate. This field is immutable. It can only be set for containers.
claims[]	object	ResourceClaim references one entry in PodSpec.ResourceClaims.
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

8.1.344. .spec.resources.claims**Description**

Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate.

This field is immutable. It can only be set for containers.

Type

array**8.1.345. .spec.resources.claims[]****Description**

ResourceClaim references one entry in PodSpec.ResourceClaims.

Type**object****Required**

- **name**

Property	Type	Description
name	string	Name must match the name of one entry in pod.spec.resourceClaims of the Pod where this field is used. It makes that resource available inside a container.
request	string	Request is the name chosen for a request in the referenced claim. If empty, everything from the claim is made available, otherwise only the result of this request.

8.1.346. .spec.ruleNamespaceSelector**Description**

Namespaces to match for PrometheusRule discovery. An empty label selector matches all namespaces. A null label selector matches the current namespace only.

Type**object**

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Property	Type	Description
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.347. .spec.ruleNamespaceSelector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.348. .spec.ruleNamespaceSelector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.349. .spec.ruleSelector

Description

PrometheusRule objects to be selected for rule evaluation. An empty label selector matches all objects. A null label selector matches no objects.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.350. .spec.ruleSelector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.351. .spec.ruleSelector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.352. .spec.rules**Description**

Defines the configuration of the Prometheus rules' engine.

Type

object

Property	Type	Description
alert	object	Defines the parameters of the Prometheus rules' engine. Any update to these parameters trigger a restart of the pods.

8.1.353. .spec.rules.alert**Description**

Defines the parameters of the Prometheus rules' engine.
Any update to these parameters trigger a restart of the pods.

Type

object

Property	Type	Description
forGracePeriod	string	Minimum duration between alert and restored 'for' state. This is maintained only for alerts with a configured 'for' time greater than the grace period.
forOutageTolerance	string	Max time to tolerate prometheus outage for restoring 'for' state of alert.
resendDelay	string	Minimum amount of time to wait before resending an alert to Alertmanager.

8.1.354. .spec.runtime

Description

RuntimeConfig configures the values for the Prometheus process behavior

Type

object

Property	Type	Description
goGC	integer	The Go garbage collection target percentage. Lowering this number may increase the CPU usage. See: https://tip.golang.org/doc/gc-guide#GOGC

8.1.355. .spec.scrapeClasses

Description

List of scrape classes to expose to scraping objects such as PodMonitors, ServiceMonitors, Probes and ScrapeConfigs.

This is an **experimental feature**, it may change in any upcoming release in a breaking way.

Type

array

8.1.356. .spec.scrapeClasses[]

Description

Type

object

Required

- **name**

Property	Type	Description
attachMetadata	object	AttachMetadata configures additional metadata to the discovered targets. When the scrape object defines its own configuration, it takes precedence over the scrape class configuration.
authorization	object	Authorization section for the ScrapeClass. It will only apply if the scrape resource doesn't specify any Authorization.
default	boolean	Default indicates that the scrape applies to all scrape objects that don't configure an explicit scrape class name. Only one scrape class can be set as the default.
fallbackScrapeProtocol	string	The protocol to use if a scrape returns blank, unparseable, or otherwise invalid Content-Type. It will only apply if the scrape resource doesn't specify any FallbackScrapeProtocol It requires Prometheus >= v3.0.0.

Property	Type	Description
metricRelabelings	array	MetricRelabelings configures the relabeling rules to apply to all samples before ingestion. The Operator adds the scrape class metric relabelings defined here. Then the Operator adds the target-specific metric relabelings defined in ServiceMonitors, PodMonitors, Probes and ScrapeConfigs. Then the Operator adds namespace enforcement relabeling rule, specified in <code>'spec.enforcedNamespaceLabel'</code>. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#metric_relabel_configs
metricRelabelings[]	object	RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config
name	string	Name of the scrape class.

Property	Type	Description
relabelings	array	Relabelings configures the relabeling rules to apply to all scrape targets. The Operator automatically adds relabelings for a few standard Kubernetes fields like __meta_kubernetes_namespace and __meta_kubernetes_service_name. Then the Operator adds the scrape class relabelings defined here. Then the Operator adds the target-specific relabelings defined in the scrape object. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config
relabelings[]	object	RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config
tlsConfig	object	TLSConfig defines the TLS settings to use for the scrape. When the scrape objects define their own CA, certificate and/or key, they take precedence over the corresponding scrape class fields. For now only the caFile, certFile and keyFile fields are supported.

8.1.357. .spec.scrapeClasses[].attachMetadata

Description

AttachMetadata configures additional metadata to the discovered targets. When the scrape object defines its own configuration, it takes precedence over the scrape class configuration.

Type

object

Property	Type	Description
node	boolean	When set to true, Prometheus attaches node metadata to the discovered targets. The Prometheus service account must have the list and watch permissions on the Nodes objects.

8.1.358. .spec.scrapeClasses[].authorization

Description

Authorization section for the ScrapeClass. It will only apply if the scrape resource doesn't specify any Authorization.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
credentialsFile	string	File to read a secret from, mutually exclusive with credentials .
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

8.1.359. .spec.scrapeClasses[].authorization.credentials

Description

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.360. .spec.scrapeClasses[].metricRelabelings

Description

MetricRelabelings configures the relabeling rules to apply to all samples before ingestion. The Operator adds the scrape class metric relabelings defined here. Then the Operator adds the target-specific metric relabelings defined in ServiceMonitors, PodMonitors, Probes and ScrapeConfigs. Then the Operator adds namespace enforcement relabeling rule, specified in '.spec.enforcedNamespaceLabel'.

More info:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#metric_relabel_configs

Type

array

8.1.361. .spec.scrapeClasses[].metricRelabelings[]

Description

RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples.

More info:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

object

Property	Type	Description

Property	Type	Description
action	string	Action to perform based on the regex matching. Uppercase and Lowercase actions require Prometheus >= v2.36.0. DropEqual and KeepEqual actions require Prometheus >= v2.41.0. Default: "Replace"
modulus	integer	Modulus to take of the hash of the source label values. Only applicable when the action is HashMod.
regex	string	Regular expression against which the extracted value is matched.
replacement	string	Replacement value against which a Replace action is performed if the regular expression matches. Regex capture groups are available.
separator	string	Separator is the string between concatenated SourceLabels.
sourceLabels	array (string)	The source labels select values from existing labels. Their content is concatenated using the configured Separator and matched against the configured regular expression.
targetLabel	string	Label to which the resulting string is written in a replacement. It is mandatory for Replace, HashMod, Lowercase, Uppercase, KeepEqual and DropEqual actions. Regex capture groups are available.

8.1.362. .spec.scrapeClasses[].relabelings

Description

Relabelings configures the relabeling rules to apply to all scrape targets.

The Operator automatically adds relabelings for a few standard Kubernetes fields like `__meta_kubernetes_namespace` and `__meta_kubernetes_service_name`. Then the Operator adds the scrape class relabelings defined here. Then the Operator adds the target-specific relabelings defined in the scrape object.

More info:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

array

8.1.363. .spec.scrapeClasses[].relabelings[]

Description

RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples.

More info:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

object

Property	Type	Description
action	string	Action to perform based on the regex matching. Uppercase and Lowercase actions require Prometheus $\geq$ v2.36.0. DropEqual and KeepEqual actions require Prometheus $\geq$ v2.41.0. Default: "Replace"
modulus	integer	Modulus to take of the hash of the source label values. Only applicable when the action is HashMod .
regex	string	Regular expression against which the extracted value is matched.

Property	Type	Description
replacement	string	Replacement value against which a Replace action is performed if the regular expression matches. Regex capture groups are available.
separator	string	Separator is the string between concatenated SourceLabels.
sourceLabels	array (string)	The source labels select values from existing labels. Their content is concatenated using the configured Separator and matched against the configured regular expression.
targetLabel	string	Label to which the resulting string is written in a replacement. It is mandatory for Replace , HashMod , Lowercase , Uppercase , KeepEqual and DropEqual actions. Regex capture groups are available.

8.1.364. .spec.scrapeClasses[].tlsConfig

Description

TLSConfig defines the TLS settings to use for the scrape. When the scrape objects define their own CA, certificate and/or key, they take precedence over the corresponding scrape class fields. For now only the **caFile**, **certFile** and **keyFile** fields are supported.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
caFile	string	Path to the CA cert in the Prometheus container to use for the targets.

Property	Type	Description
cert	object	Client certificate to present when doing client-authentication.
certFile	string	Path to the client cert file in the Prometheus container for the targets.
insecureSkipVerify	boolean	Disable target certificate validation.
keyFile	string	Path to the client key file in the Prometheus container for the targets.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

8.1.365. .spec.scrapeClasses[].tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.366. .spec.scrapeClasses[].tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.367. .spec.scrapeClasses[].tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.368. .spec.scrapeClasses[].tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.369. .spec.scrapeClasses[].tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.370. .spec.scrapeClasses[].tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.371. .spec.scrapeClasses[].tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object**Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.372. .spec.scrapeConfigNamespaceSelector**Description**

Namespaces to match for ScrapeConfig discovery. An empty label selector matches all namespaces. A null label selector matches the current namespace only.

Note that the ScrapeConfig custom resource definition is currently at Alpha level.

Type**object**

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Property	Type	Description
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.373. .spec.scrapeConfigNamespaceSelector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.374. .spec.scrapeConfigNamespaceSelector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.375. .spec.scrapeConfigSelector

Description

ScrapeConfigs to be selected for target discovery. An empty label selector matches all objects. A null label selector matches no objects.

If **spec.serviceMonitorSelector**, **spec.podMonitorSelector**, **spec.probeSelector** and **spec.scrapeConfigSelector** are null, the Prometheus configuration is unmanaged. The Prometheus operator will ensure that the Prometheus configuration's Secret exists, but it is the responsibility of the user to provide the raw gzipped Prometheus configuration under the **prometheus.yaml.gz** key. This behavior is **deprecated** and will be removed in the next major version of the custom resource definition. It is recommended to use **spec.additionalScrapeConfigs** instead.

Note that the ScrapeConfig custom resource definition is currently at Alpha level.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.376. .spec.scrapeConfigSelector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.377. .spec.scrapeConfigSelector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.378. .spec.securityContext

Description

SecurityContext holds pod-level security attributes and common container settings. This defaults to the default PodSecurityContext.

Type

object

Property	Type	Description
appArmorProfile	object	appArmorProfile is the AppArmor options to use by the containers in this pod. Note that this field cannot be set when spec.os.name is windows.
fsGroup	integer	A special supplemental group that applies to all containers in a pod. Some volume types allow the Kubelet to change the ownership of that volume to be owned by the pod: 1. The owning GID will be the FSGroup 2. The setgid bit is set (new files created in the volume will be owned by FSGroup) 3. The permission bits are OR'd with rw-rw---- If unset, the Kubelet will not modify the ownership and permissions of any volume. Note that this field cannot be set when spec.os.name is windows.
fsGroupChangePolicy	string	fsGroupChangePolicy defines behavior of changing ownership and permission of the volume before being exposed inside Pod. This field will only apply to volume types which support fsGroup based ownership (and permissions). It will have no effect on ephemeral volume types such as: secret, configmaps and emptydir. Valid values are "OnRootMismatch" and "Always". If not specified, "Always" is used. Note that this field cannot be set when spec.os.name is windows.
runAsGroup	integer	The GID to run the entrypoint of the container process. Uses runtime default if unset. May also be set in SecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence for that container. Note that this field cannot be set when spec.os.name is windows.

Property	Type	Description
runAsNonRoot	boolean	Indicates that the container must run as a non-root user. If true, the Kubelet will validate the image at runtime to ensure that it does not run as UID 0 (root) and fail to start the container if it does. If unset or false, no such validation will be performed. May also be set in SecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.
runAsUser	integer	The UID to run the entrypoint of the container process. Defaults to user specified in image metadata if unspecified. May also be set in SecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence for that container. Note that this field cannot be set when spec.os.name is windows.
seLinuxChangePolicy	string	seLinuxChangePolicy defines how the container's SELinux label is applied to all volumes used by the Pod. It has no effect on nodes that do not support SELinux or to volumes does not support SELinux. Valid values are "MountOption" and "Recursive". "Recursive" means relabeling of all files on all Pod volumes by the container runtime. This may be slow for large volumes, but allows mixing privileged and unprivileged Pods sharing the same volume on the same node. "MountOption" mounts all eligible Pod volumes with -o context mount option. This requires all Pods that share the same volume to use the same SELinux label. It is not possible to share the same volume among privileged and unprivileged Pods. Eligible

Property	Type	Description
		volumes are in-tree FibreChannel and iSCSI volumes, and all CSI volumes whose CSI driver announces SELinux support by setting <code>spec.seLinuxMount: true</code> in their <code>CSIDriver</code> instance. Other volumes are always re-labelled recursively. "MountOption" value is allowed only when SELinuxMount feature gate is enabled. If not specified and SELinuxMount feature gate is enabled, "MountOption" is used. If not specified and SELinuxMount feature gate is disabled, "MountOption" is used for <code>ReadWriteOncePod</code> volumes and "Recursive" for all other volumes. This field affects only Pods that have SELinux label set, either in <code>PodSecurityContext</code> or in <code>SecurityContext</code> of all containers. All Pods that use the same volume should use the same <code>seLinuxChangePolicy</code>, otherwise some pods can get stuck in <code>ContainerCreating</code> state. Note that this field cannot be set when <code>spec.os.name</code> is <code>windows</code>.
seLinuxOptions	object	The SELinux context to be applied to all containers. If unspecified, the container runtime will allocate a random SELinux context for each container. May also be set in <code>SecurityContext</code>. If set in both <code>SecurityContext</code> and <code>PodSecurityContext</code>, the value specified in <code>SecurityContext</code> takes precedence for that container. Note that this field cannot be set when <code>spec.os.name</code> is <code>windows</code>.
seccompProfile	object	The seccomp options to use by the containers in this pod. Note that this field cannot be set when <code>spec.os.name</code> is <code>windows</code>.

Property	Type	Description
supplementalGroups	array (integer)	A list of groups applied to the first process run in each container, in addition to the container's primary GID and fsGroup (if specified). If the SupplementalGroupsPolicy feature is enabled, the supplementalGroupsPolicy field determines whether these are in addition to or instead of any group memberships defined in the container image. If unspecified, no additional groups are added, though group memberships defined in the container image may still be used, depending on the supplementalGroupsPolicy field. Note that this field cannot be set when spec.os.name is windows.
supplementalGroupsPolicy	string	Defines how supplemental groups of the first container processes are calculated. Valid values are "Merge" and "Strict". If not specified, "Merge" is used. (Alpha) Using the field requires the SupplementalGroupsPolicy feature gate to be enabled and the container runtime must implement support for this feature. Note that this field cannot be set when spec.os.name is windows.
sysctls	array	Sysctls hold a list of namespaced sysctls used for the pod. Pods with unsupported sysctls (by the container runtime) might fail to launch. Note that this field cannot be set when spec.os.name is windows.
sysctls[]	object	Sysctl defines a kernel parameter to be set

Property	Type	Description
windowsOptions	object	The Windows specific settings applied to all containers. If unspecified, the options within a container's SecurityContext will be used. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is linux.

8.1.379. .spec.securityContext.appArmorProfile

Description

appArmorProfile is the AppArmor options to use by the containers in this pod. Note that this field cannot be set when spec.os.name is windows.

Type

object

Required

- **type**

Property	Type	Description
localhostProfile	string	localhostProfile indicates a profile loaded on the node that should be used. The profile must be preconfigured on the node to work. Must match the loaded name of the profile. Must be set if and only if type is "Localhost".
type	string	type indicates which kind of AppArmor profile will be applied. Valid options are: Localhost - a profile pre-loaded on the node. RuntimeDefault - the container runtime's default profile. Unconfined - no AppArmor enforcement.

8.1.380. .spec.securityContext.seLinuxOptions

Description

The SELinux context to be applied to all containers. If unspecified, the container runtime will allocate a random SELinux context for each container. May also be set in SecurityContext. If set in both

SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence for that container. Note that this field cannot be set when spec.os.name is windows.

Type

object

Property	Type	Description
level	string	Level is SELinux level label that applies to the container.
role	string	Role is a SELinux role label that applies to the container.
type	string	Type is a SELinux type label that applies to the container.
user	string	User is a SELinux user label that applies to the container.

8.1.381. .spec.securityContext.seccompProfile

Description

The seccomp options to use by the containers in this pod. Note that this field cannot be set when spec.os.name is windows.

Type

object

Required

- **type**

Property	Type	Description
localhostProfile	string	localhostProfile indicates a profile defined in a file on the node should be used. The profile must be preconfigured on the node to work. Must be a descending path, relative to the kubelet's configured seccomp profile location. Must be set if type is "Localhost". Must NOT be set for any other type.

Property	Type	Description
type	string	type indicates which kind of seccomp profile will be applied. Valid options are: Localhost - a profile defined in a file on the node should be used. RuntimeDefault - the container runtime default profile should be used. Unconfined - no profile should be applied.

8.1.382. .spec.securityContext.sysctls

Description

Sysctls hold a list of namespaced sysctls used for the pod. Pods with unsupported sysctls (by the container runtime) might fail to launch. Note that this field cannot be set when spec.os.name is windows.

Type

array

8.1.383. .spec.securityContext.sysctls[]

Description

Sysctl defines a kernel parameter to be set

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	Name of a property to set
value	string	Value of a property to set

8.1.384. .spec.securityContext.windowsOptions

Description

The Windows specific settings applied to all containers. If unspecified, the options within a container's SecurityContext will be used. If set in both SecurityContext and PodSecurityContext, the value

specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is linux.

Type

object

Property	Type	Description
gmsaCredentialSpec	string	GMSACredentialSpec is where the GMSA admission webhook (https://github.com/kubernetes-sigs/windows-gmsa) inlines the contents of the GMSA credential spec named by the <code>GMSACredentialSpecName</code> field.
gmsaCredentialSpecName	string	GMSACredentialSpecName is the name of the GMSA credential spec to use.
hostProcess	boolean	HostProcess determines if a container should be run as a 'Host Process' container. All of a Pod's containers must have the same effective HostProcess value (it is not allowed to have a mix of HostProcess containers and non-HostProcess containers). In addition, if HostProcess is true then HostNetwork must also be set to true.
runAsUserName	string	The UserName in Windows to run the entrypoint of the container process. Defaults to the user specified in image metadata if unspecified. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.

8.1.385. .spec.serviceMonitorNamespaceSelector

Description

Namespaces to match for ServicedMonitors discovery. An empty label selector matches all namespaces. A null label selector (default value) matches the current namespace only.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.386. .spec.serviceMonitorNamespaceSelector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.387. .spec.serviceMonitorNamespaceSelector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.

Property	Type	Description
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.388. .spec.serviceMonitorSelector

Description

ServiceMonitors to be selected for target discovery. An empty label selector matches all objects. A null label selector matches no objects.

If **spec.serviceMonitorSelector**, **spec.podMonitorSelector**, **spec.probeSelector** and **spec.scrapeConfigSelector** are null, the Prometheus configuration is unmanaged. The Prometheus operator will ensure that the Prometheus configuration's Secret exists, but it is the responsibility of the user to provide the raw gzipped Prometheus configuration under the **prometheus.yaml.gz** key. This behavior is **deprecated** and will be removed in the next major version of the custom resource definition. It is recommended to use **spec.additionalScrapeConfigs** instead.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Property	Type	Description
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.389. .spec.serviceMonitorSelector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.390. .spec.serviceMonitorSelector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.391. .spec.shardRetentionPolicy

Description

ShardRetentionPolicy defines the retention policy for the Prometheus shards. (Alpha) Using this field requires the 'PrometheusShardRetentionPolicy' feature gate to be enabled.

The final goals for this feature can be seen at <https://github.com/prometheus-operator/prometheus-operator/blob/main/Documentation/proposals/202310-shard-autoscaling.md#graceful-scale-down-of-prometheus-servers>, however, the feature is not yet fully implemented in this PR. The limitation being: * Retention duration is not settable, for now, shards are retained forever.

Type

object

Property	Type	Description
retain	object	Defines the config for retention when the retention policy is set to Retain . This field is ineffective as of now.
whenScaled	string	Defines the retention policy when the Prometheus shards are scaled down. * Delete , the operator will delete the pods from the scaled-down shard(s). * Retain , the operator will keep the pods from the scaled-down shard(s), so the data can still be queried. If not defined, the operator assumes the Delete value.

8.1.392. .spec.shardRetentionPolicy.retain

Description

Defines the config for retention when the retention policy is set to **Retain**. This field is ineffective as of now.

Type**object****Required**

- **retentionPeriod**

Property	Type	Description
retentionPeriod	string	Duration is a valid time duration that can be parsed by Prometheus model.ParseDuration() function. Supported units: y, w, d, h, m, s, ms Examples: 30s , 1m , 1h20m15s , 15d

8.1.393. .spec.storage

Description

Storage defines the storage used by Prometheus.

Type**object**

Property	Type	Description
disableMountSubPath	boolean	Deprecated: subPath usage will be removed in a future release.
emptyDir	object	EmptyDirVolumeSource to be used by the StatefulSet. If specified, it takes precedence over ephemeral and volumeClaimTemplate . More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Property	Type	Description
ephemeral	object	EphemeralVolumeSource to be used by the StatefulSet. This is a beta field in k8s 1.21 and GA in 1.15. For lower versions, starting with k8s 1.19, it requires enabling the GenericEphemeralVolume feature gate. More info: https://kubernetes.io/docs/concepts/storage/ephemeral-volumes/#generic-ephemeral-volumes
volumeClaimTemplate	object	Defines the PVC spec to be used by the Prometheus StatefulSets. The easiest way to use a volume that cannot be automatically provisioned is to use a label selector alongside manually created PersistentVolumes.

8.1.394. .spec.storage.emptyDir

Description

EmptyDirVolumeSource to be used by the StatefulSet. If specified, it takes precedence over **ephemeral** and **volumeClaimTemplate**. More info:

<https://kubernetes.io/docs/concepts/storage/volumes/#emptydir>

Type

object

Property	Type	Description
medium	string	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir

Property	Type	Description
sizeLimit	integer-or-string	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir

8.1.395. .spec.storage.ephemeral

Description

EphemeralVolumeSource to be used by the StatefulSet. This is a beta field in k8s 1.21 and GA in 1.15. For lower versions, starting with k8s 1.19, it requires enabling the GenericEphemeralVolume feature gate. More info: <https://kubernetes.io/docs/concepts/storage/ephemeral-volumes/#generic-ephemeral-volumes>

Type

object

Property	Type	Description

Property	Type	Description
volumeClaimTemplate	object	Will be used to create a stand-alone PVC to provision the volume. The pod in which this EphemeralVolumeSource is embedded will be the owner of the PVC, i.e. the PVC will be deleted together with the pod. The name of the PVC will be <pod name>-<volume name> where <volume name> is the name from the PodSpec.Volumes array entry. Pod validation will reject the pod if the concatenated name is not valid for a PVC (for example, too long). An existing PVC with that name that is not owned by the pod will not be used for the pod to avoid using an unrelated volume by mistake. Starting the pod is then blocked until the unrelated PVC is removed. If such a pre-created PVC is meant to be used by the pod, the PVC has to updated with an owner reference to the pod once the pod exists. Normally this should not be necessary, but it may be useful when manually reconstructing a broken cluster. This field is read-only and no changes will be made by Kubernetes to the PVC after it has been created. Required, must not be nil.

8.1.396. .spec.storage.ephemeral.volumeClaimTemplate

Description

Will be used to create a stand-alone PVC to provision the volume. The pod in which this EphemeralVolumeSource is embedded will be the owner of the PVC, i.e. the PVC will be deleted together with the pod. The name of the PVC will be **<pod name>-<volume name>** where **<volume name>** is the name from the **PodSpec.Volumes** array entry. Pod validation will reject the pod if the concatenated name is not valid for a PVC (for example, too long).

An existing PVC with that name that is not owned by the pod will **not** be used for the pod to avoid using an unrelated volume by mistake. Starting the pod is then blocked until the unrelated PVC is removed. If such a pre-created PVC is meant to be used by the pod, the PVC has to updated with an

owner reference to the pod once the pod exists. Normally this should not be necessary, but it may be useful when manually reconstructing a broken cluster.

This field is read-only and no changes will be made by Kubernetes to the PVC after it has been created.

Required, must not be nil.

Type

object

Required

- **spec**

Property	Type	Description
metadata	object	May contain labels and annotations that will be copied into the PVC when creating it. No other fields are allowed and will be rejected during validation.
spec	object	The specification for the PersistentVolumeClaim. The entire content is copied unchanged into the PVC that gets created from this template. The same fields as in a PersistentVolumeClaim are also valid here.

8.1.397. `.spec.storage.ephemeral.volumeClaimTemplate.metadata`

Description

May contain labels and annotations that will be copied into the PVC when creating it. No other fields are allowed and will be rejected during validation.

Type

object

8.1.398. `.spec.storage.ephemeral.volumeClaimTemplate.spec`

Description

The specification for the PersistentVolumeClaim. The entire content is copied unchanged into the PVC that gets created from this template. The same fields as in a PersistentVolumeClaim are also valid here.

Type

object

Property	Type	Description
accessModes	array (string)	accessModes contains the desired access modes the volume should have. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#access-modes-1
dataSource	object	dataSource field can be used to specify either: * An existing VolumeSnapshot object (snapshot.storage.k8s.io/VolumeSnapshot) * An existing PVC (PersistentVolumeClaim) If the provisioner or an external controller can support the specified data source, it will create a new volume based on the contents of the specified data source. When the AnyVolumeDataSource feature gate is enabled, dataSource contents will be copied to dataSourceRef, and dataSourceRef contents will be copied to dataSource when dataSourceRef.namespace is not specified. If the namespace is specified, then dataSourceRef will not be copied to dataSource.

Property	Type	Description
dataSourceRef	object	dataSourceRef specifies the object from which to populate the volume with data, if a non-empty volume is desired. This may be any object from a non-empty API group (non core object) or a PersistentVolumeClaim object. When this field is specified, volume binding will only succeed if the type of the specified object matches some installed volume populator or dynamic provisioner. This field will replace the functionality of the dataSource field and as such if both fields are non-empty, they must have the same value. For backwards compatibility, when namespace isn't specified in dataSourceRef, both fields (dataSource and dataSourceRef) will be set to the same value automatically if one of them is empty and the other is non-empty. When namespace is specified in dataSourceRef, dataSource isn't set to the same value and must be empty. There are three important differences between dataSource and dataSourceRef: * - While dataSource only allows two specific types of objects, dataSourceRef allows any non-core object, as well as PersistentVolumeClaim objects. * - While dataSource ignores disallowed values (dropping them), dataSourceRef preserves all values, and generates an error if a disallowed value is specified. * - While dataSource only allows local objects, dataSourceRef allows objects in any namespaces. (Beta) Using this field requires the AnyVolumeDataSource feature gate to be enabled. (Alpha) Using the namespace field of dataSourceRef requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

Property	Type	Description
resources	object	resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources
selector	object	selector is a label query over volumes to consider for binding.
storageClassName	string	storageClassName is the name of the StorageClass required by the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#class-1

Property	Type	Description
volumeAttributesClassName	string	volumeAttributesClassName may be used to set the VolumeAttributesClass used by this claim. If specified, the CSI driver will create or update the volume with the attributes defined in the corresponding VolumeAttributesClass. This has a different purpose than storageClassName, it can be changed after the claim is created. An empty string value means that no VolumeAttributesClass will be applied to the claim but it's not allowed to reset this field to empty string once it is set. If unspecified and the PersistentVolumeClaim is unbound, the default VolumeAttributesClass will be set by the persistentvolume controller if it exists. If the resource referred to by volumeAttributesClass does not exist, this PersistentVolumeClaim will be set to a Pending state, as reflected by the modifyVolumeStatus field, until such as a resource exists. More info: https://kubernetes.io/docs/concepts/storage/volume-attributes-classes/ (Beta) Using this field requires the VolumeAttributesClass feature gate to be enabled (off by default).
volumeMode	string	volumeMode defines what type of volume is required by the claim. Value of Filesystem is implied when not included in claim spec.
volumeName	string	volumeName is the binding reference to the PersistentVolume backing this claim.

8.1.399. .spec.storage.ephemeral.volumeClaimTemplate.spec.dataSource

Description

dataSource field can be used to specify either: * An existing VolumeSnapshot object (snapshot.storage.k8s.io/VolumeSnapshot) * An existing PVC (PersistentVolumeClaim) If the provisioner or an external controller can support the specified data source, it will create a new volume based on the contents of the specified data source. When the AnyVolumeDataSource feature gate is enabled, dataSource contents will be copied to dataSourceRef, and dataSourceRef contents will be copied to dataSource when dataSourceRef.namespace is not specified. If the namespace is specified, then dataSourceRef will not be copied to dataSource.

Type

object

Required

- **kind**
- **name**

Property	Type	Description
apiGroup	string	APIGroup is the group for the resource being referenced. If APIGroup is not specified, the specified Kind must be in the core API group. For any other third-party types, APIGroup is required.
kind	string	Kind is the type of resource being referenced
name	string	Name is the name of resource being referenced

8.1.400. .spec.storage.ephemeral.volumeClaimTemplate.spec.dataSourceRef

Description

dataSourceRef specifies the object from which to populate the volume with data, if a non-empty volume is desired. This may be any object from a non-empty API group (non core object) or a PersistentVolumeClaim object. When this field is specified, volume binding will only succeed if the type of the specified object matches some installed volume populator or dynamic provisioner. This field will replace the functionality of the dataSource field and as such if both fields are non-empty, they must have the same value. For backwards compatibility, when namespace isn't specified in dataSourceRef, both fields (dataSource and dataSourceRef) will be set to the same value automatically if one of them is empty and the other is non-empty. When namespace is specified in dataSourceRef, dataSource isn't set to the same value and must be empty. There are three important differences between dataSource and dataSourceRef: * While dataSource only allows two specific types of objects, dataSourceRef allows any non-core object, as well as PersistentVolumeClaim objects. * While dataSource ignores disallowed values (dropping them), dataSourceRef preserves all values, and generates an error if a disallowed value is specified. * While dataSource only allows local objects, dataSourceRef allows objects in any namespaces. (Beta) Using this field requires the AnyVolumeDataSource feature gate to be enabled. (Alpha) Using the namespace field of dataSourceRef requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

Type**object****Required**

- **kind**
- **name**

Property	Type	Description
apiGroup	string	APIGroup is the group for the resource being referenced. If APIGroup is not specified, the specified Kind must be in the core API group. For any other third-party types, APIGroup is required.
kind	string	Kind is the type of resource being referenced
name	string	Name is the name of resource being referenced
namespace	string	Namespace is the namespace of resource being referenced Note that when a namespace is specified, a gateway.networking.k8s.io/ReferenceGrant object is required in the referent namespace to allow that namespace's owner to accept the reference. See the ReferenceGrant documentation for details. (Alpha) This field requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

8.1.401. .spec.storage.ephemeral.volumeClaimTemplate.spec.resources**Description**

resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: <https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources>

Type**object**

Property	Type	Description
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

8.1.402. .spec.storage.ephemeral.volumeClaimTemplate.spec.selector

Description

selector is a label query over volumes to consider for binding.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.403. .spec.storage.ephemeral.volumeClaimTemplate.spec.selector.matchExpressio

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.404. .spec.storage.ephemeral.volumeClaimTemplate.spec.selector.matchExpressions**Description**

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.405. .spec.storage.volumeClaimTemplate**Description**

Defines the PVC spec to be used by the Prometheus StatefulSets. The easiest way to use a volume that cannot be automatically provisioned is to use a label selector alongside manually created PersistentVolumes.

Type

object

Property	Type	Description
apiVersion	string	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	string	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	object	EmbeddedMetadata contains metadata relevant to an EmbeddedResource.
spec	object	Defines the desired characteristics of a volume requested by a pod author. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
status	object	Deprecated: this field is never set.

8.1.406. .spec.storage.volumeClaimTemplate.metadata

Description

EmbeddedMetadata contains metadata relevant to an EmbeddedResource.

Type

object

Property	Type	Description

Property	Type	Description
annotations	object (string)	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations/
labels	object (string)	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/
name	string	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/

8.1.407. .spec.storage.volumeClaimTemplate.spec

Description

Defines the desired characteristics of a volume requested by a pod author. More info: <https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims>

Type

object

Property	Type	Description

Property	Type	Description
accessModes	array (string)	accessModes contains the desired access modes the volume should have. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#access-modes-1
dataSource	object	dataSource field can be used to specify either: * An existing VolumeSnapshot object (snapshot.storage.k8s.io/VolumeSnapshot) * An existing PVC (PersistentVolumeClaim) If the provisioner or an external controller can support the specified data source, it will create a new volume based on the contents of the specified data source. When the AnyVolumeDataSource feature gate is enabled, dataSource contents will be copied to dataSourceRef, and dataSourceRef contents will be copied to dataSource when dataSourceRef.namespace is not specified. If the namespace is specified, then dataSourceRef will not be copied to dataSource.

Property	Type	Description
dataSourceRef	object	dataSourceRef specifies the object from which to populate the volume with data, if a non-empty volume is desired. This may be any object from a non-empty API group (non core object) or a PersistentVolumeClaim object. When this field is specified, volume binding will only succeed if the type of the specified object matches some installed volume populator or dynamic provisioner. This field will replace the functionality of the dataSource field and as such if both fields are non-empty, they must have the same value. For backwards compatibility, when namespace isn't specified in dataSourceRef, both fields (dataSource and dataSourceRef) will be set to the same value automatically if one of them is empty and the other is non-empty. When namespace is specified in dataSourceRef, dataSource isn't set to the same value and must be empty. There are three important differences between dataSource and dataSourceRef: * - While dataSource only allows two specific types of objects, dataSourceRef allows any non-core object, as well as PersistentVolumeClaim objects. * - While dataSource ignores disallowed values (dropping them), dataSourceRef preserves all values, and generates an error if a disallowed value is specified. * - While dataSource only allows local objects, dataSourceRef allows objects in any namespaces. (Beta) Using this field requires the AnyVolumeDataSource feature gate to be enabled. (Alpha) Using the namespace field of dataSourceRef requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

Property	Type	Description
resources	object	resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources
selector	object	selector is a label query over volumes to consider for binding.
storageClassName	string	storageClassName is the name of the StorageClass required by the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#class-1

Property	Type	Description
volumeAttributesClassName	string	volumeAttributesClassName may be used to set the VolumeAttributesClass used by this claim. If specified, the CSI driver will create or update the volume with the attributes defined in the corresponding VolumeAttributesClass. This has a different purpose than storageClassName, it can be changed after the claim is created. An empty string value means that no VolumeAttributesClass will be applied to the claim but it's not allowed to reset this field to empty string once it is set. If unspecified and the PersistentVolumeClaim is unbound, the default VolumeAttributesClass will be set by the persistentvolume controller if it exists. If the resource referred to by volumeAttributesClass does not exist, this PersistentVolumeClaim will be set to a Pending state, as reflected by the modifyVolumeStatus field, until such as a resource exists. More info: https://kubernetes.io/docs/concepts/storage/volume-attributes-classes/ (Beta) Using this field requires the VolumeAttributesClass feature gate to be enabled (off by default).
volumeMode	string	volumeMode defines what type of volume is required by the claim. Value of Filesystem is implied when not included in claim spec.
volumeName	string	volumeName is the binding reference to the PersistentVolume backing this claim.

8.1.408. .spec.storage.volumeClaimTemplate.spec.dataSource

Description

dataSource field can be used to specify either: * An existing VolumeSnapshot object (snapshot.storage.k8s.io/VolumeSnapshot) * An existing PVC (PersistentVolumeClaim) If the provisioner or an external controller can support the specified data source, it will create a new volume based on the contents of the specified data source. When the AnyVolumeDataSource feature gate is enabled, dataSource contents will be copied to dataSourceRef, and dataSourceRef contents will be copied to dataSource when dataSourceRef.namespace is not specified. If the namespace is specified, then dataSourceRef will not be copied to dataSource.

Type

object

Required

- **kind**
- **name**

Property	Type	Description
apiGroup	string	APIGroup is the group for the resource being referenced. If APIGroup is not specified, the specified Kind must be in the core API group. For any other third-party types, APIGroup is required.
kind	string	Kind is the type of resource being referenced
name	string	Name is the name of resource being referenced

8.1.409. .spec.storage.volumeClaimTemplate.spec.dataSourceRef

Description

dataSourceRef specifies the object from which to populate the volume with data, if a non-empty volume is desired. This may be any object from a non-empty API group (non core object) or a PersistentVolumeClaim object. When this field is specified, volume binding will only succeed if the type of the specified object matches some installed volume populator or dynamic provisioner. This field will replace the functionality of the dataSource field and as such if both fields are non-empty, they must have the same value. For backwards compatibility, when namespace isn't specified in dataSourceRef, both fields (dataSource and dataSourceRef) will be set to the same value automatically if one of them is empty and the other is non-empty. When namespace is specified in dataSourceRef, dataSource isn't set to the same value and must be empty. There are three important differences between dataSource and dataSourceRef: * While dataSource only allows two specific types of objects, dataSourceRef allows any non-core object, as well as PersistentVolumeClaim objects. * While dataSource ignores disallowed values (dropping them), dataSourceRef preserves all values, and generates an error if a disallowed value is specified. * While dataSource only allows local objects, dataSourceRef allows objects in any namespaces. (Beta) Using this field requires the AnyVolumeDataSource feature gate to be enabled. (Alpha) Using the namespace field of dataSourceRef requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

Type**object****Required**

- **kind**
- **name**

Property	Type	Description
apiGroup	string	APIGroup is the group for the resource being referenced. If APIGroup is not specified, the specified Kind must be in the core API group. For any other third-party types, APIGroup is required.
kind	string	Kind is the type of resource being referenced
name	string	Name is the name of resource being referenced
namespace	string	Namespace is the namespace of resource being referenced Note that when a namespace is specified, a gateway.networking.k8s.io/ReferenceGrant object is required in the referent namespace to allow that namespace's owner to accept the reference. See the ReferenceGrant documentation for details. (Alpha) This field requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

8.1.410. .spec.storage.volumeClaimTemplate.spec.resources**Description**

resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: <https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources>

Type**object**

Property	Type	Description
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

8.1.411. .spec.storage.volumeClaimTemplate.spec.selector

Description

selector is a label query over volumes to consider for binding.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.412. .spec.storage.volumeClaimTemplate.spec.selector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.413. .spec.storage.volumeClaimTemplate.spec.selector.matchExpressions[]**Description**

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.414. .spec.storage.volumeClaimTemplate.status**Description**

Deprecated: this field is never set.

Type

object

Property	Type	Description

Property	Type	Description
accessModes	array (string)	accessModes contains the actual access modes the volume backing the PVC has. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#access-modes-1
allocatedResourceStatuses	object (string)	allocatedResourceStatuses stores status of resource being resized for the given PVC. Key names follow standard Kubernetes label syntax. Valid values are either: * Un-prefixed keys: - storage - the capacity of the volume. * Custom resources must use implementation-defined prefixed names such as "example.com/my-custom-resource" Apart from above values - keys that are unprefixed or have kubernetes.io prefix are considered reserved and hence may not be used. ClaimResourceStatus can be in any of following states: - ControllerResizeInProgress: State set when resize controller starts resizing the volume in control-plane. - ControllerResizeFailed: State set when resize has failed in resize controller with a terminal error. - NodeResizePending: State set when resize controller has finished resizing the volume but further resizing of volume is needed on the node. - NodeResizeInProgress: State set when kubelet starts resizing the volume. - NodeResizeFailed: State set when resizing has failed in kubelet with a terminal error. Transient errors don't set NodeResizeFailed. For example: if expanding a PVC for more capacity - this field can be one of the following states: - pvc.status.allocatedResourceStatus['storage'] = "ControllerResizeInProgress" - pvc.status.allocatedResourceStatus['storage'] =

Property	Type	Description
		"ControllerResizeFailed" - pvc.status.allocatedResourceStatus['storage'] = "NodeResizePending" - pvc.status.allocatedResourceStatus['storage'] = "NodeResizeInProgress" - pvc.status.allocatedResourceStatus['storage'] = "NodeResizeFailed" When this field is not set, it means that no resize operation is in progress for the given PVC. A controller that receives PVC update with previously unknown resourceName or ClaimResourceStatus should ignore the update for the purpose it was designed. For example - a controller that only is responsible for resizing capacity of the volume, should ignore PVC updates that change other valid resources associated with PVC. This is an alpha field and requires enabling RecoverVolumeExpansionFailure feature.

Property	Type	Description
allocatedResources	integer-or-string	allocatedResources tracks the resources allocated to a PVC including its capacity. Key names follow standard Kubernetes label syntax. Valid values are either: * Un-prefixed keys: - storage - the capacity of the volume. * Custom resources must use implementation-defined prefixed names such as "example.com/my-custom-resource" Apart from above values - keys that are unprefixed or have kubernetes.io prefix are considered reserved and hence may not be used. Capacity reported here may be larger than the actual capacity when a volume expansion operation is requested. For storage quota, the larger value from allocatedResources and PVC.spec.resources is used. If allocatedResources is not set, PVC.spec.resources alone is used for quota calculation. If a volume expansion capacity request is lowered, allocatedResources is only lowered if there are no expansion operations in progress and if the actual volume capacity is equal or lower than the requested capacity. A controller that receives PVC update with previously unknown resourceName should ignore the update for the purpose it was designed. For example - a controller that only is responsible for resizing capacity of the volume, should ignore PVC updates that change other valid resources associated with PVC. This is an alpha field and requires enabling RecoverVolumeExpansionFailure feature.
capacity	integer-or-string	capacity represents the actual resources of the underlying volume.

Property	Type	Description
conditions	array	conditions is the current Condition of persistent volume claim. If underlying persistent volume is being resized then the Condition will be set to 'Resizing'.
conditions[]	object	PersistentVolumeClaimCondition contains details about state of pvc
currentVolumeAttributesClassName	string	currentVolumeAttributesClassName is the current name of the VolumeAttributesClass the PVC is using. When unset, there is no VolumeAttributeClass applied to this PersistentVolumeClaim This is a beta field and requires enabling VolumeAttributesClass feature (off by default).
modifyVolumeStatus	object	ModifyVolumeStatus represents the status object of ControllerModifyVolume operation. When this is unset, there is no ModifyVolume operation being attempted. This is a beta field and requires enabling VolumeAttributesClass feature (off by default).
phase	string	phase represents the current phase of PersistentVolumeClaim.

8.1.415. .spec.storage.volumeClaimTemplate.status.conditions

Description

conditions is the current Condition of persistent volume claim. If underlying persistent volume is being resized then the Condition will be set to 'Resizing'.

Type

array

8.1.416. .spec.storage.volumeClaimTemplate.status.conditions[]

Description

PersistentVolumeClaimCondition contains details about state of pvc

Type

object

Required

- **status**
- **type**

Property	Type	Description
lastProbeTime	string	lastProbeTime is the time we probed the condition.
lastTransitionTime	string	lastTransitionTime is the time the condition transitioned from one status to another.
message	string	message is the human-readable message indicating details about last transition.
reason	string	reason is a unique, this should be a short, machine understandable string that gives the reason for condition's last transition. If it reports "Resizing" that means the underlying persistent volume is being resized.
status	string	Status is the status of the condition. Can be True, False, Unknown. More info: https://kubernetes.io/docs/reference/kubernetes-api/config-and-storage-resources/persistent-volume-claim-v1/#:~:text=state%20of%20pvc-,conditions.status,-(string)%2C%20required
type	string	Type is the type of the condition. More info: https://kubernetes.io/docs/reference/kubernetes-api/config-and-storage-resources/persistent-volume-claim-v1/#:~:text=set%20to%20%27ResizedStarted%27.-,PersistentVolumeClaimCondition,-contains%20details%20about

8.1.417. .spec.storage.volumeClaimTemplate.status.modifyVolumeStatus

Description

ModifyVolumeStatus represents the status object of ControllerModifyVolume operation. When this is unset, there is no ModifyVolume operation being attempted. This is a beta field and requires enabling VolumeAttributesClass feature (off by default).

Type

object

Required

- **status**

Property	Type	Description
status	string	status is the status of the ControllerModifyVolume operation. It can be in any of following states: - Pending Pending indicates that the PersistentVolumeClaim cannot be modified due to unmet requirements, such as the specified VolumeAttributesClass not existing. - InProgress InProgress indicates that the volume is being modified. - Infeasible Infeasible indicates that the request has been rejected as invalid by the CSI driver. To resolve the error, a valid VolumeAttributesClass needs to be specified. Note: New statuses can be added in the future. Consumers should check for unknown statuses and fail appropriately.
targetVolumeAttributesClassName	string	targetVolumeAttributesClassName is the name of the VolumeAttributesClass the PVC currently being reconciled

8.1.418. .spec.thanos**Description**

Defines the configuration of the optional Thanos sidecar.

Type

object

Property	Type	Description
additionalArgs	array	AdditionalArgs allows setting additional arguments for the Thanos container. The arguments are passed as-is to the Thanos container which may cause issues if they are invalid or not supported the given Thanos version. In case of an argument conflict (e.g. an argument which is already set by the operator itself) or when providing an invalid argument, the reconciliation will fail and an error will be logged.
additionalArgs[]	object	Argument as part of the AdditionalArgs list.
baseImage	string	Deprecated: use 'image' instead.
blockSize	string	BlockDuration controls the size of TSDB blocks produced by Prometheus. The default value is 2h to match the upstream Prometheus defaults. WARNING: Changing the block duration can impact the performance and efficiency of the entire Prometheus/Thanos stack due to how it interacts with memory and Thanos compactors. It is recommended to keep this value set to a multiple of 120 times your longest scrape or rule interval. For example, 30s * 120 = 1h.
getConfigInterval	string	How often to retrieve the Prometheus configuration.
getConfigTimeout	string	Maximum time to wait when retrieving the Prometheus configuration.
grpcListenLocal	boolean	When true, the Thanos sidecar listens on the loopback interface instead of the Pod IP's address for the gRPC endpoints. It has no effect if listenLocal is true.

Property	Type	Description
grpcServerTlsConfig	object	Configures the TLS parameters for the gRPC server providing the StoreAPI. Note: Currently only the caFile, certFile, and keyFile fields are supported.
httpListenLocal	boolean	When true, the Thanos sidecar listens on the loopback interface instead of the Pod IP's address for the HTTP endpoints. It has no effect if listenLocal is true.
image	string	Container image name for Thanos. If specified, it takes precedence over the spec.thanos.baseImage, spec.thanos.tag and spec.thanos.sha fields. Specifying spec.thanos.version is still necessary to ensure the Prometheus Operator knows which version of Thanos is being configured. If neither spec.thanos.image nor spec.thanos.baseImage are defined, the operator will use the latest upstream version of Thanos available at the time when the operator was released.
listenLocal	boolean	Deprecated: use grpcListenLocal and httpListenLocal instead.
logFormat	string	Log format for the Thanos sidecar.

Property	Type	Description
logLevel	string	Log level for the Thanos sidecar.
minTime	string	Defines the start of time range limit served by the Thanos sidecar's StoreAPI. The field's value should be a constant time in RFC3339 format or a time duration relative to current time, such as -1d or 2h45m. Valid duration units are ms, s, m, h, d, w, y.
objectStorageConfig	object	Defines the Thanos sidecar's configuration to upload TSDB blocks to object storage. More info: https://thanos.io/tip/thanos/storage.md/ objectStorageConfigFile takes precedence over this field.
objectStorageConfigFile	string	Defines the Thanos sidecar's configuration file to upload TSDB blocks to object storage. More info: https://thanos.io/tip/thanos/storage.md/ This field takes precedence over objectStorageConfig.
readyTimeout	string	ReadyTimeout is the maximum time that the Thanos sidecar will wait for Prometheus to start.
resources	object	Defines the resources requests and limits of the Thanos sidecar.
sha	string	Deprecated: use 'image' instead. The image digest can be specified as part of the image name.
tag	string	Deprecated: use 'image' instead. The image's tag can be specified as part of the image name.

Property	Type	Description
tracingConfig	object	Defines the tracing configuration for the Thanos sidecar. tracingConfigFile takes precedence over this field. More info: https://thanos.io/tip/thanos/tracing.md/ This is an experimental feature, it may change in any upcoming release in a breaking way.
tracingConfigFile	string	Defines the tracing configuration file for the Thanos sidecar. This field takes precedence over tracingConfig. More info: https://thanos.io/tip/thanos/tracing.md/ This is an experimental feature, it may change in any upcoming release in a breaking way.
version	string	Version of Thanos being deployed. The operator uses this information to generate the Prometheus StatefulSet + configuration files. If not specified, the operator assumes the latest upstream release of Thanos available at the time when the version of the operator was released.
volumeMounts	array	VolumeMounts allows configuration of additional VolumeMounts for Thanos. VolumeMounts specified will be appended to other VolumeMounts in the 'thanos-sidecar' container.
volumeMounts[]	object	VolumeMount describes a mounting of a Volume within a container.

8.1.419. .spec.thanos.additionalArgs

Description

AdditionalArgs allows setting additional arguments for the Thanos container. The arguments are passed as-is to the Thanos container which may cause issues if they are invalid or not supported the given Thanos version. In case of an argument conflict (e.g. an argument which is already set by the operator itself) or when providing an invalid argument, the reconciliation will fail and an error will be logged.

Type

array

8.1.420. .spec.thanos.additionalArgs[]

Description

Argument as part of the AdditionalArgs list.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name of the argument, e.g. "scrape.discovery-reload-interval".
value	string	Argument value, e.g. 30s. Can be empty for name-only arguments (e.g. --storage.tsdb.no-lockfile)

8.1.421. .spec.thanos.grpcServerTlsConfig

Description

Configures the TLS parameters for the gRPC server providing the StoreAPI.

Note: Currently only the **caFile**, **certFile**, and **keyFile** fields are supported.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.

Property	Type	Description
caFile	string	Path to the CA cert in the Prometheus container to use for the targets.
cert	object	Client certificate to present when doing client-authentication.
certFile	string	Path to the client cert file in the Prometheus container for the targets.
insecureSkipVerify	boolean	Disable target certificate validation.
keyFile	string	Path to the client key file in the Prometheus container for the targets.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

8.1.422. .spec.thanos.grpcServerTlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.

Property	Type	Description
secret	object	Secret containing data to use for the targets.

8.1.423. .spec.thanos.grpcServerTlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.424. .spec.thanos.grpcServerTlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.425. .spec.thanos.grpcServerTlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.426. .spec.thanos.grpcServerTlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.427. .spec.thanos.grpcServerTlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.428. .spec.thanos.grpcServerTlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.429. .spec.thanos.objectStorageConfig

Description

Defines the Thanos sidecar's configuration to upload TSDB blocks to object storage.

More info: <https://thanos.io/tip/thanos/storage.md/>

objectStorageConfigFile takes precedence over this field.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.430. .spec.thanos.resources

Description

Defines the resources requests and limits of the Thanos sidecar.

Type

object

Property	Type	Description
claims	array	Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate. This field is immutable. It can only be set for containers.
claims[]	object	ResourceClaim references one entry in PodSpec.ResourceClaims.
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Property	Type	Description
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

8.1.431. .spec.thanos.resources.claims

Description

Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate.

This field is immutable. It can only be set for containers.

Type

array

8.1.432. .spec.thanos.resources.claims[]

Description

ResourceClaim references one entry in PodSpec.ResourceClaims.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name must match the name of one entry in pod.spec.resourceClaims of the Pod where this field is used. It makes that resource available inside a container.

Property	Type	Description
request	string	Request is the name chosen for a request in the referenced claim. If empty, everything from the claim is made available, otherwise only the result of this request.

8.1.433. .spec.thanos.tracingConfig

Description

Defines the tracing configuration for the Thanos sidecar.

tracingConfigFile takes precedence over this field.

More info: <https://thanos.io/tip/thanos/tracing.md/>

This is an **experimental feature**, it may change in any upcoming release in a breaking way.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.434. .spec.thanos.volumeMounts

Description

VolumeMounts allows configuration of additional VolumeMounts for Thanos. VolumeMounts specified will be appended to other VolumeMounts in the 'thanos-sidecar' container.

Type

array

8.1.435. .spec.thanos.volumeMounts[]

Description

VolumeMount describes a mounting of a Volume within a container.

Type

object

Required

- **mountPath**
- **name**

Property	Type	Description
mountPath	string	Path within the container at which the volume should be mounted. Must not contain '.'.
mountPropagation	string	mountPropagation determines how mounts are propagated from the host to container and the other way around. When not set, MountPropagationNone is used. This field is beta in 1.10. When RecursiveReadOnly is set to IfPossible or to Enabled, MountPropagation must be None or unspecified (which defaults to None).
name	string	This must match the Name of a Volume.
readOnly	boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.

Property	Type	Description
recursiveReadOnly	string	RecursiveReadOnly specifies whether read-only mounts should be handled recursively. If ReadOnly is false, this field has no meaning and must be unspecified. If ReadOnly is true, and this field is set to Disabled, the mount is not made recursively read-only. If this field is set to IfPossible, the mount is made recursively read-only, if it is supported by the container runtime. If this field is set to Enabled, the mount is made recursively read-only if it is supported by the container runtime, otherwise the pod will not be started and an error will be generated to indicate the reason. If this field is set to IfPossible or Enabled, MountPropagation must be set to None (or be unspecified, which defaults to None). If this field is not specified, it is treated as an equivalent of Disabled.
subPath	string	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root).
subPathExpr	string	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

8.1.436. .spec.tolerations

Description

Defines the Pods' tolerations if specified.

Type**array****8.1.437. .spec.tolerations[]****Description**

The pod this Toleration is attached to tolerates any taint that matches the triple <key,value,effect> using the matching operator <operator>.

Type**object**

Property	Type	Description
effect	string	Effect indicates the taint effect to match. Empty means match all taint effects. When specified, allowed values are NoSchedule, PreferNoSchedule and NoExecute.
key	string	Key is the taint key that the toleration applies to. Empty means match all taint keys. If the key is empty, operator must be Exists; this combination means to match all values and all keys.
operator	string	Operator represents a key's relationship to the value. Valid operators are Exists and Equal. Defaults to Equal. Exists is equivalent to wildcard for value, so that a pod can tolerate all taints of a particular category.
tolerationSeconds	integer	TolerationSeconds represents the period of time the toleration (which must be of effect NoExecute, otherwise this field is ignored) tolerates the taint. By default, it is not set, which means tolerate the taint forever (do not evict). Zero and negative values will be treated as 0 (evict immediately) by the system.
value	string	Value is the taint value the toleration matches to. If the operator is Exists, the value should be empty, otherwise just a regular string.

8.1.438. .spec.topologySpreadConstraints

Description

Defines the pod's topology spread constraints if specified.

Type

array

8.1.439. .spec.topologySpreadConstraints[]

Description

Type

object

Required

- **maxSkew**
- **topologyKey**
- **whenUnsatisfiable**

Property	Type	Description
additionalLabelSelectors	string	Defines what Prometheus Operator managed labels should be added to labelSelector on the topologySpreadConstraint.
labelSelector	object	LabelSelector is used to find matching pods. Pods that match this label selector are counted to determine the number of pods in their corresponding topology domain.

Property	Type	Description
matchLabelKeys	array (string)	MatchLabelKeys is a set of pod label keys to select the pods over which spreading will be calculated. The keys are used to lookup values from the incoming pod labels, those key-value labels are ANDed with labelSelector to select the group of existing pods over which spreading will be calculated for the incoming pod. The same key is forbidden to exist in both MatchLabelKeys and LabelSelector. MatchLabelKeys cannot be set when LabelSelector isn't set. Keys that don't exist in the incoming pod labels will be ignored. A null or empty list means only match against labelSelector. This is a beta field and requires the MatchLabelKeysInPodTopologySpread feature gate to be enabled (enabled by default).

Property	Type	Description
maxSkew	integer	MaxSkew describes the degree to which pods may be unevenly distributed. When whenUnsatisfiable=DoNotSchedule, it is the maximum permitted difference between the number of matching pods in the target topology and the global minimum. The global minimum is the minimum number of matching pods in an eligible domain or zero if the number of eligible domains is less than MinDomains. For example, in a 3-zone cluster, MaxSkew is set to 1, and pods with the same labelSelector spread as 2/2/1: In this case, the global minimum is 1. zone1 zone2 zone3 P P P P P - if MaxSkew is 1, incoming pod can only be scheduled to zone3 to become 2/2/2; scheduling it onto zone1(zone2) would make the ActualSkew(3-1) on zone1(zone2) violate MaxSkew(1). - if MaxSkew is 2, incoming pod can be scheduled onto any zone. When whenUnsatisfiable=ScheduleAnyway, it is used to give higher precedence to topologies that satisfy it. It's a required field. Default value is 1 and 0 is not allowed.

Property	Type	Description
minDomains	integer	MinDomains indicates a minimum number of eligible domains. When the number of eligible domains with matching topology keys is less than minDomains, Pod Topology Spread treats "global minimum" as 0, and then the calculation of Skew is performed. And when the number of eligible domains with matching topology keys equals or greater than minDomains, this value has no effect on scheduling. As a result, when the number of eligible domains is less than minDomains, scheduler won't schedule more than maxSkew Pods to those domains. If value is nil, the constraint behaves as if MinDomains is equal to 1. Valid values are integers greater than 0. When value is not nil, WhenUnsatisfiable must be DoNotSchedule. For example, in a 3-zone cluster, MaxSkew is set to 2, MinDomains is set to 5 and pods with the same labelSelector spread as 2/2/2: zone1 zone2 zone3 P P P P P P The number of domains is less than 5(MinDomains), so "global minimum" is treated as 0. In this situation, new pod with the same labelSelector cannot be scheduled, because computed skew will be 3(3 - 0) if new Pod is scheduled to any of the three zones, it will violate MaxSkew.

Property	Type	Description
nodeAffinityPolicy	string	NodeAffinityPolicy indicates how we will treat Pod's nodeAffinity/nodeSelector when calculating pod topology spread skew. Options are: - Honor: only nodes matching nodeAffinity/nodeSelector are included in the calculations. - Ignore: nodeAffinity/nodeSelector are ignored. All nodes are included in the calculations. If this value is nil, the behavior is equivalent to the Honor policy.
nodeTaintsPolicy	string	NodeTaintsPolicy indicates how we will treat node taints when calculating pod topology spread skew. Options are: - Honor: nodes without taints, along with tainted nodes for which the incoming pod has a toleration, are included. - Ignore: node taints are ignored. All nodes are included. If this value is nil, the behavior is equivalent to the Ignore policy.
topologyKey	string	TopologyKey is the key of node labels. Nodes that have a label with this key and identical values are considered to be in the same topology. We consider each <key, value> as a "bucket", and try to put balanced number of pods into each bucket. We define a domain as a particular instance of a topology. Also, we define an eligible domain as a domain whose nodes meet the requirements of nodeAffinityPolicy and nodeTaintsPolicy. e.g. If TopologyKey is "kubernetes.io/hostname", each Node is a domain of that topology. And, if TopologyKey is "topology.kubernetes.io/zone", each zone is a domain of that topology. It's a required field.

Property	Type	Description
whenUnsatisfiable	string	WhenUnsatisfiable indicates how to deal with a pod if it doesn't satisfy the spread constraint. - DoNotSchedule (default) tells the scheduler not to schedule it. - ScheduleAnyway tells the scheduler to schedule the pod in any location, but giving higher precedence to topologies that would help reduce the skew. A constraint is considered "Unsatisfiable" for an incoming pod if and only if every possible node assignment for that pod would violate "MaxSkew" on some topology. For example, in a 3-zone cluster, MaxSkew is set to 1, and pods with the same labelSelector spread as 3/1/1: zone1 zone2 zone3 P P P P P If WhenUnsatisfiable is set to DoNotSchedule, incoming pod can only be scheduled to zone2(zone3) to become 3/2/1(3/1/2) as ActualSkew(2-1) on zone2(zone3) satisfies MaxSkew(1). In other words, the cluster can still be imbalanced, but scheduler won't make it more imbalanced. It's a required field.

8.1.440. .spec.topologySpreadConstraints[].labelSelector

Description

LabelSelector is used to find matching pods. Pods that match this label selector are counted to determine the number of pods in their corresponding topology domain.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Property	Type	Description
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.441. .spec.topologySpreadConstraints[].labelSelector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.442. .spec.topologySpreadConstraints[].labelSelector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.443. .spec.tracingConfig

Description

TracingConfig configures tracing in Prometheus.

This is an **experimental feature**, it may change in any upcoming release in a breaking way.

Type

object

Required

- **endpoint**

Property	Type	Description
clientType	string	Client used to export the traces. Supported values are http or grpc .
compression	string	Compression key for supported compression types. The only supported value is gzip .
endpoint	string	Endpoint to send the traces to. Should be provided in format <host>:<port>.
headers	object (string)	Key-value pairs to be used as headers associated with gRPC or HTTP requests.
insecure	boolean	If disabled, the client will use a secure connection.

Property	Type	Description
samplingFraction	integer-or-string	Sets the probability a given trace will be sampled. Must be a float from 0 through 1.
timeout	string	Maximum time the exporter will wait for each batch export.
tlsConfig	object	TLS Config to use when sending traces.

8.1.444. .spec.tracingConfig.tlsConfig

Description

TLS Config to use when sending traces.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
caFile	string	Path to the CA cert in the Prometheus container to use for the targets.
cert	object	Client certificate to present when doing client-authentication.
certFile	string	Path to the client cert file in the Prometheus container for the targets.
insecureSkipVerify	boolean	Disable target certificate validation.
keyFile	string	Path to the client key file in the Prometheus container for the targets.
keySecret	object	Secret containing the client key file for the targets.

Property	Type	Description
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

8.1.445. .spec.tracingConfig.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.446. .spec.tracingConfig.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.447. .spec.tracingConfig.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.448. .spec.tracingConfig.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.449. `.spec.tracingConfig.tlsConfig.cert.configMap`

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.450. `.spec.tracingConfig.tlsConfig.cert.secret`

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.451. .spec.tracingConfig.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.452. .spec.tsdb

Description

Defines the runtime reloadable configuration of the timeseries database(TSDB). It requires Prometheus >= v2.39.0 or PrometheusAgent >= v2.54.0.

Type

object

Property	Type	Description
outOfOrderTimeWindow	string	Configures how old an out-of-order/out-of-bounds sample can be with respect to the TSDB max time. An out-of-order/out-of-bounds sample is ingested into the TSDB as long as the timestamp of the sample is >= (TSDB.MaxTime - outOfOrderTimeWindow). This is an experimental feature, it may change in any upcoming release in a breaking way. It requires Prometheus >= v2.39.0 or PrometheusAgent >= v2.54.0.

8.1.453. .spec.volumeMounts

Description

VolumeMounts allows the configuration of additional VolumeMounts.

VolumeMounts will be appended to other VolumeMounts in the 'prometheus' container, that are generated as a result of StorageSpec objects.

Type

array

8.1.454. .spec.volumeMounts[]

Description

VolumeMount describes a mounting of a Volume within a container.

Type

object

Required

- **mountPath**
- **name**

Property	Type	Description
mountPath	string	Path within the container at which the volume should be mounted. Must not contain ':
mountPropagation	string	mountPropagation determines how mounts are propagated from the host to container and the other way around. When not set, MountPropagationNone is used. This field is beta in 1.10. When RecursiveReadOnly is set to IfPossible or to Enabled, MountPropagation must be None or unspecified (which defaults to None).
name	string	This must match the Name of a Volume.
readOnly	boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.

Property	Type	Description
recursiveReadOnly	string	RecursiveReadOnly specifies whether read-only mounts should be handled recursively. If ReadOnly is false, this field has no meaning and must be unspecified. If ReadOnly is true, and this field is set to Disabled, the mount is not made recursively read-only. If this field is set to IfPossible, the mount is made recursively read-only, if it is supported by the container runtime. If this field is set to Enabled, the mount is made recursively read-only if it is supported by the container runtime, otherwise the pod will not be started and an error will be generated to indicate the reason. If this field is set to IfPossible or Enabled, MountPropagation must be set to None (or be unspecified, which defaults to None). If this field is not specified, it is treated as an equivalent of Disabled.
subPath	string	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root).
subPathExpr	string	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

8.1.455. .spec.volumes

Description

Volumes allows the configuration of additional volumes on the output StatefulSet definition. Volumes specified will be appended to other volumes that are generated as a result of StorageSpec objects.

Type

array

8.1.456. .spec.volumes[]

Description

Volume represents a named volume in a pod that may be accessed by any container in the pod.

Type

object

Required

- **name**

Property	Type	Description
awsElasticBlockStore	object	awsElasticBlockStore represents an AWS Disk resource that is attached to a kubelet's host machine and then exposed to the pod. Deprecated: AWSElasticBlockStore is deprecated. All operations for the in-tree awsElasticBlockStore type are redirected to the ebs.csi.aws.com CSI driver. More info: https://kubernetes.io/docs/concepts/storage/volumes#awselasticblockstore
azureDisk	object	azureDisk represents an Azure Data Disk mount on the host and bind mount to the pod. Deprecated: AzureDisk is deprecated. All operations for the in-tree azureDisk type are redirected to the disk.csi.azure.com CSI driver.
azureFile	object	azureFile represents an Azure File Service mount on the host and bind mount to the pod. Deprecated: AzureFile is deprecated. All operations for the in-tree azureFile type are redirected to the file.csi.azure.com CSI driver.

Property	Type	Description
cephfs	object	cephFS represents a Ceph FS mount on the host that shares a pod's lifetime. Deprecated: CephFS is deprecated and the in-tree cephfs type is no longer supported.
cinder	object	cinder represents a cinder volume attached and mounted on kubelets host machine. Deprecated: Cinder is deprecated. All operations for the in-tree cinder type are redirected to the cinder.csi.openstack.org CSI driver. More info: https://examples.k8s.io/mysql-cinder-pd/README.md
configMap	object	configMap represents a configMap that should populate this volume
csi	object	csi (Container Storage Interface) represents ephemeral storage that is handled by certain external CSI drivers.
downwardAPI	object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir

Property	Type	Description
ephemeral	object	ephemeral represents a volume that is handled by a cluster storage driver. The volume's lifecycle is tied to the pod that defines it - it will be created before the pod starts, and deleted when the pod is removed. Use this if: a) the volume is only needed while the pod runs, b) features of normal volumes like restoring from snapshot or capacity tracking are needed, c) the storage driver is specified through a storage class, and d) the storage driver supports dynamic volume provisioning through a PersistentVolumeClaim (see EphemeralVolumeSource for more information on the connection between this volume type and PersistentVolumeClaim). Use PersistentVolumeClaim or one of the vendor-specific APIs for volumes that persist for longer than the lifecycle of an individual pod. Use CSI for light-weight local ephemeral volumes if the CSI driver is meant to be used that way - see the documentation of the driver for more information. A pod can use both types of ephemeral volumes and persistent volumes at the same time.
fc	object	fc represents a Fibre Channel resource that is attached to a kubelet's host machine and then exposed to the pod.
flexVolume	object	flexVolume represents a generic volume resource that is provisioned/attached using an exec based plugin. Deprecated: FlexVolume is deprecated. Consider using a CSIDriver instead.

Property	Type	Description
flocker	object	flocker represents a Flocker volume attached to a kubelet's host machine. This depends on the Flocker control service being running. Deprecated: Flocker is deprecated and the in-tree flocker type is no longer supported.
gcePersistentDisk	object	gcePersistentDisk represents a GCE Disk resource that is attached to a kubelet's host machine and then exposed to the pod. Deprecated: GCEPersistentDisk is deprecated. All operations for the in-tree gcePersistentDisk type are redirected to the pd.csi.storage.gke.io CSI driver. More info: https://kubernetes.io/docs/concepts/storage/volumes#gcepersistentdisk
gitRepo	object	gitRepo represents a git repository at a particular revision. Deprecated: GitRepo is deprecated. To provision a container with a git repo, mount an EmptyDir into an InitContainer that clones the repo using git, then mount the EmptyDir into the Pod's container.
glusterfs	object	glusterfs represents a Glusterfs mount on the host that shares a pod's lifetime. Deprecated: Glusterfs is deprecated and the in-tree glusterfs type is no longer supported. More info: https://examples.k8s.io/volumes/glusterfs/README.md

Property	Type	Description
hostPath	object	hostPath represents a pre-existing file or directory on the host machine that is directly exposed to the container. This is generally used for system agents or other privileged things that are allowed to see the host machine. Most containers will NOT need this. More info: https://kubernetes.io/docs/concepts/storage/volumes#hostpath
image	object	image represents an OCI object (a container image or artifact) pulled and mounted on the kubelet's host machine. The volume is resolved at pod startup depending on which PullPolicy value is provided: - Always: the kubelet always attempts to pull the reference. Container creation will fail if the pull fails. - Never: the kubelet never pulls the reference and only uses a local image or artifact. Container creation will fail if the reference isn't present. - IfNotPresent: the kubelet pulls if the reference isn't already present on disk. Container creation will fail if the reference isn't present and the pull fails. The volume gets re-resolved if the pod gets deleted and recreated, which means that new remote content will become available on pod recreation. A failure to resolve or pull the image during pod startup will block containers from starting and may add significant latency. Failures will be retried using normal volume backoff and will be reported on the pod reason and message. The types of objects that may be mounted by this volume are defined by the container runtime implementation on a host machine and at minimum must include all valid types supported by the container

Property	Type	Description
		image field. The OCI object gets mounted in a single directory (spec.containers[].volumeMounts.mountPath) by merging the manifest layers in the same way as for container images. The volume will be mounted read-only (ro) and non-executable files (noexec). Sub path mounts for containers are not supported (spec.containers[].volumeMounts.subpath) before 1.33. The field spec.securityContext.fsGroupChangePolicy has no effect on this volume type.
iscsi	object	iscsi represents an iSCSI Disk resource that is attached to a kubelet's host machine and then exposed to the pod. More info: https://examples.k8s.io/volumes/iscsi/README.md
name	string	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
nfs	object	nfs represents an NFS mount on the host that shares a pod's lifetime More info: https://kubernetes.io/docs/concepts/storage/volumes#nfs
persistentVolumeClaim	object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
photonPersistentDisk	object	photonPersistentDisk represents a PhotonController persistent disk attached and mounted on kubelets host machine. Deprecated: PhotonPersistentDisk is deprecated and the in-tree photonPersistentDisk type is no longer supported.

Property	Type	Description
portworxVolume	object	portworxVolume represents a portworx volume attached and mounted on kubelets host machine. Deprecated: PortworxVolume is deprecated. All operations for the in-tree portworxVolume type are redirected to the pxd.portworx.com CSI driver when the CSIMigrationPortworx feature-gate is on.
projected	object	projected items for all in one resources secrets, configmaps, and downward API
quobyte	object	quobyte represents a Quobyte mount on the host that shares a pod's lifetime. Deprecated: Quobyte is deprecated and the in-tree quobyte type is no longer supported.
rbd	object	rbd represents a Rados Block Device mount on the host that shares a pod's lifetime. Deprecated: RBD is deprecated and the in-tree rbd type is no longer supported. More info: https://examples.k8s.io/volumes/rbd/README.md
scaleIO	object	scaleIO represents a ScaleIO persistent volume attached and mounted on Kubernetes nodes. Deprecated: ScaleIO is deprecated and the in-tree scaleIO type is no longer supported.
secret	object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Property	Type	Description
storageos	object	storageOS represents a StorageOS volume attached and mounted on Kubernetes nodes. Deprecated: StorageOS is deprecated and the in-tree storageos type is no longer supported.
vsphereVolume	object	vsphereVolume represents a vSphere volume attached and mounted on kubelets host machine. Deprecated: VsphereVolume is deprecated. All operations for the in-tree vsphereVolume type are redirected to the csi.vsphere.vmware.com CSI driver.

8.1.457. .spec.volumes[].awsElasticBlockStore

Description

awsElasticBlockStore represents an AWS Disk resource that is attached to a kubelet's host machine and then exposed to the pod. Deprecated: AWSElasticBlockStore is deprecated. All operations for the in-tree awsElasticBlockStore type are redirected to the ebs.csi.aws.com CSI driver. More info: <https://kubernetes.io/docs/concepts/storage/volumes#awselasticblockstore>

Type

object

Required

- **volumeID**

Property	Type	Description
fsType	string	fsType is the filesystem type of the volume that you want to mount. Tip: Ensure that the filesystem type is supported by the host operating system. Examples: "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified. More info: https://kubernetes.io/docs/concepts/storage/volumes#awselasticblockstore

Property	Type	Description
partition	integer	partition is the partition in the volume that you want to mount. If omitted, the default is to mount by volume name. Examples: For volume /dev/sda1, you specify the partition as "1". Similarly, the volume partition for /dev/sda is "0" (or you can leave the property empty).
readOnly	boolean	readOnly value true will force the readOnly setting in VolumeMounts. More info: https://kubernetes.io/docs/concepts/storage/volumes#awselasticblockstore
volumeID	string	volumeID is unique ID of the persistent disk resource in AWS (Amazon EBS volume). More info: https://kubernetes.io/docs/concepts/storage/volumes#awselasticblockstore

8.1.458. .spec.volumes[].azureDisk

Description

azureDisk represents an Azure Data Disk mount on the host and bind mount to the pod. Deprecated: AzureDisk is deprecated. All operations for the in-tree azureDisk type are redirected to the disk.csi.azure.com CSI driver.

Type

object

Required

- **diskName**
- **diskURI**

Property	Type	Description
cachingMode	string	cachingMode is the Host Caching mode: None, Read Only, Read Write.

Property	Type	Description
diskName	string	diskName is the Name of the data disk in the blob storage
diskURI	string	diskURI is the URI of data disk in the blob storage
fsType	string	fsType is Filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified.
kind	string	kind expected values are Shared: multiple blob disks per storage account Dedicated: single blob disk per storage account Managed: azure managed data disk (only in managed availability set). defaults to shared
readOnly	boolean	readOnly Defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.

8.1.459. .spec.volumes[].azureFile

Description

azureFile represents an Azure File Service mount on the host and bind mount to the pod.

Deprecated: AzureFile is deprecated. All operations for the in-tree azureFile type are redirected to the file.csi.azure.com CSI driver.

Type

object

Required

- **secretName**
- **shareName**

Property	Type	Description

Property	Type	Description
readOnly	boolean	readOnly defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.
secretName	string	secretName is the name of secret that contains Azure Storage Account Name and Key
shareName	string	shareName is the azure share Name

8.1.460. .spec.volumes[].cephfs

Description

cephFS represents a Ceph FS mount on the host that shares a pod's lifetime. Deprecated: CephFS is deprecated and the in-tree cephfs type is no longer supported.

Type

object

Required

- **monitors**

Property	Type	Description
monitors	array (string)	monitors is Required: Monitors is a collection of Ceph monitors More info: https://examples.k8s.io/volumes/cephfs/README.md#how-to-use-it
path	string	path is Optional: Used as the mounted root, rather than the full Ceph tree, default is /
readOnly	boolean	readOnly is Optional: Defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts. More info: https://examples.k8s.io/volumes/cephfs/README.md#how-to-use-it

Property	Type	Description
secretFile	string	secretFile is Optional: SecretFile is the path to key ring for User, default is /etc/ceph/user.secret More info: https://examples.k8s.io/volumes/cephfs/README.md#how-to-use-it
secretRef	object	secretRef is Optional: SecretRef is reference to the authentication secret for User, default is empty. More info: https://examples.k8s.io/volumes/cephfs/README.md#how-to-use-it
user	string	user is optional: User is the rados user name, default is admin More info: https://examples.k8s.io/volumes/cephfs/README.md#how-to-use-it

8.1.461. .spec.volumes[].cephfs.secretRef

Description

secretRef is Optional: SecretRef is reference to the authentication secret for User, default is empty.
More info: <https://examples.k8s.io/volumes/cephfs/README.md#how-to-use-it>

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

8.1.462. .spec.volumes[].cinder

Description

cinder represents a cinder volume attached and mounted on kubelets host machine. Deprecated:

Cinder is deprecated. All operations for the in-tree cinder type are redirected to the cinder.csi.openstack.org CSI driver. More info: <https://examples.k8s.io/mysql-cinder-pd/README.md>

Type

object

Required

- **volumeID**

Property	Type	Description
fsType	string	fsType is the filesystem type to mount. Must be a filesystem type supported by the host operating system. Examples: "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified. More info: https://examples.k8s.io/mysql-cinder-pd/README.md
readOnly	boolean	readOnly defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts. More info: https://examples.k8s.io/mysql-cinder-pd/README.md
secretRef	object	secretRef is optional: points to a secret object containing parameters used to connect to OpenStack.
volumeID	string	volumeID used to identify the volume in cinder. More info: https://examples.k8s.io/mysql-cinder-pd/README.md

8.1.463. .spec.volumes[].cinder.secretRef

Description

secretRef is optional: points to a secret object containing parameters used to connect to OpenStack.

Type

object

Property	Type	Description

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

8.1.464. .spec.volumes[].configMap

Description

configMap represents a configMap that should populate this volume

Type

object

Property	Type	Description
defaultMode	integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Property	Type	Description
items	array	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.
items[]	object	Maps a string key to a path within a volume.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	optional specify whether the ConfigMap or its keys must be defined

8.1.465. .spec.volumes[].configMap.items

Description

items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.

Type

array

8.1.466. .spec.volumes[].configMap.items[]

Description

Maps a string key to a path within a volume.

Type

object

Required

- **key**
- **path**

Property	Type	Description
key	string	key is the key to project.
mode	integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	string	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

8.1.467. .spec.volumes[].csi

Description

csi (Container Storage Interface) represents ephemeral storage that is handled by certain external CSI drivers.

Type

object

Required

- **driver**

Property	Type	Description
driver	string	driver is the name of the CSI driver that handles this volume. Consult with your admin for the correct name as registered in the cluster.
fsType	string	fsType to mount. Ex. "ext4", "xfs", "ntfs". If not provided, the empty value is passed to the associated CSI driver which will determine the default filesystem to apply.
nodePublishSecretRef	object	nodePublishSecretRef is a reference to the secret object containing sensitive information to pass to the CSI driver to complete the CSI NodePublishVolume and NodeUnpublishVolume calls. This field is optional, and may be empty if no secret is required. If the secret object contains more than one secret, all secret references are passed.
readOnly	boolean	readOnly specifies a read-only configuration for the volume. Defaults to false (read/write).
volumeAttributes	object (string)	volumeAttributes stores driver-specific properties that are passed to the CSI driver. Consult your driver's documentation for supported values.

8.1.468. .spec.volumes[].csi.nodePublishSecretRef

Description

nodePublishSecretRef is a reference to the secret object containing sensitive information to pass to the CSI driver to complete the CSI NodePublishVolume and NodeUnpublishVolume calls. This field is optional, and may be empty if no secret is required. If the secret object contains more than one secret, all secret references are passed.

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

8.1.469. .spec.volumes[].downwardAPI

Description

downwardAPI represents downward API about the pod that should populate this volume

Type

object

Property	Type	Description
defaultMode	integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	array	Items is a list of downward API volume file
items[]	object	DownwardAPIVolumeFile represents information to create the file containing the pod field

8.1.470. .spec.volumes[].downwardAPI.items

Description

Items is a list of downward API volume file

Type

array

8.1.471. .spec.volumes[].downwardAPI.items[]

Description

DownwardAPIVolumeFile represents information to create the file containing the pod field

Type

object

Required

- **path**

Property	Type	Description
fieldRef	object	Required: Selects a field of the pod: only annotations, labels, name, namespace and uid are supported.
mode	integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	string	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

8.1.472. .spec.volumes[].downwardAPI.items[].fieldRef

Description

Required: Selects a field of the pod: only annotations, labels, name, namespace and uid are supported.

Type

object

Required

- **fieldPath**

Property	Type	Description
apiVersion	string	Version of the schema the FieldPath is written in terms of, defaults to "v1".
fieldPath	string	Path of the field to select in the specified API version.

8.1.473. .spec.volumes[].downwardAPI.items[].resourceFieldRef

Description

Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Type

object

Required

- **resource**

Property	Type	Description
containerName	string	Container name: required for volumes, optional for env vars
divisor	integer-or-string	Specifies the output format of the exposed resources, defaults to "1"
resource	string	Required: resource to select

8.1.474. .spec.volumes[].emptyDir

Description

emptyDir represents a temporary directory that shares a pod's lifetime. More info:
<https://kubernetes.io/docs/concepts/storage/volumes#emptydir>

Type

object

Property	Type	Description
medium	string	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	integer-or-string	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir

8.1.475. .spec.volumes[].ephemeral

Description

ephemeral represents a volume that is handled by a cluster storage driver. The volume's lifecycle is tied to the pod that defines it - it will be created before the pod starts, and deleted when the pod is removed.

Use this if: a) the volume is only needed while the pod runs, b) features of normal volumes like restoring from snapshot or capacity tracking are needed, c) the storage driver is specified through a storage class, and d) the storage driver supports dynamic volume provisioning through a PersistentVolumeClaim (see EphemeralVolumeSource for more information on the connection between this volume type and PersistentVolumeClaim).

Use PersistentVolumeClaim or one of the vendor-specific APIs for volumes that persist for longer than the lifecycle of an individual pod.

Use CSI for light-weight local ephemeral volumes if the CSI driver is meant to be used that way - see the documentation of the driver for more information.

A pod can use both types of ephemeral volumes and persistent volumes at the same time.

Type

object

Property	Type	Description
volumeClaimTemplate	object	Will be used to create a stand-alone PVC to provision the volume. The pod in which this EphemeralVolumeSource is embedded will be the owner of the PVC, i.e. the PVC will be deleted together with the pod. The name of the PVC will be <pod name>-<volume name> where <volume name> is the name from the PodSpec.Volumes array entry. Pod validation will reject the pod if the concatenated name is not valid for a PVC (for example, too long). An existing PVC with that name that is not owned by the pod will not be used for the pod to avoid using an unrelated volume by mistake. Starting the pod is then blocked until the unrelated PVC is removed. If such a pre-created PVC is meant to be used by the pod, the PVC has to updated with an owner reference to the pod once the pod exists. Normally this should not be necessary, but it may be useful when manually reconstructing a broken cluster. This field is read-only and no changes will be made by Kubernetes to the PVC after it has been created. Required, must not be nil.

8.1.476. .spec.volumes[].ephemeral.volumeClaimTemplate**Description**

Will be used to create a stand-alone PVC to provision the volume. The pod in which this EphemeralVolumeSource is embedded will be the owner of the PVC, i.e. the PVC will be deleted together with the pod. The name of the PVC will be **<pod name>-<volume name>** where **<volume name>** is the name from the **PodSpec.Volumes** array entry. Pod validation will reject the pod if the concatenated name is not valid for a PVC (for example, too long).

An existing PVC with that name that is not owned by the pod will **not** be used for the pod to avoid using an unrelated volume by mistake. Starting the pod is then blocked until the unrelated PVC is removed. If such a pre-created PVC is meant to be used by the pod, the PVC has to updated with an

owner reference to the pod once the pod exists. Normally this should not be necessary, but it may be useful when manually reconstructing a broken cluster.

This field is read-only and no changes will be made by Kubernetes to the PVC after it has been created.

Required, must not be nil.

Type

object

Required

- **spec**

Property	Type	Description
metadata	object	May contain labels and annotations that will be copied into the PVC when creating it. No other fields are allowed and will be rejected during validation.
spec	object	The specification for the PersistentVolumeClaim. The entire content is copied unchanged into the PVC that gets created from this template. The same fields as in a PersistentVolumeClaim are also valid here.

8.1.477. `.spec.volumes[].ephemeral.volumeClaimTemplate.metadata`

Description

May contain labels and annotations that will be copied into the PVC when creating it. No other fields are allowed and will be rejected during validation.

Type

object

8.1.478. `.spec.volumes[].ephemeral.volumeClaimTemplate.spec`

Description

The specification for the PersistentVolumeClaim. The entire content is copied unchanged into the PVC that gets created from this template. The same fields as in a PersistentVolumeClaim are also valid here.

Type

object

Property	Type	Description
accessModes	array (string)	accessModes contains the desired access modes the volume should have. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#access-modes-1
dataSource	object	dataSource field can be used to specify either: * An existing VolumeSnapshot object (snapshot.storage.k8s.io/VolumeSnapshot) * An existing PVC (PersistentVolumeClaim) If the provisioner or an external controller can support the specified data source, it will create a new volume based on the contents of the specified data source. When the AnyVolumeDataSource feature gate is enabled, dataSource contents will be copied to dataSourceRef, and dataSourceRef contents will be copied to dataSource when dataSourceRef.namespace is not specified. If the namespace is specified, then dataSourceRef will not be copied to dataSource.

Property	Type	Description
dataSourceRef	object	dataSourceRef specifies the object from which to populate the volume with data, if a non-empty volume is desired. This may be any object from a non-empty API group (non core object) or a PersistentVolumeClaim object. When this field is specified, volume binding will only succeed if the type of the specified object matches some installed volume populator or dynamic provisioner. This field will replace the functionality of the dataSource field and as such if both fields are non-empty, they must have the same value. For backwards compatibility, when namespace isn't specified in dataSourceRef, both fields (dataSource and dataSourceRef) will be set to the same value automatically if one of them is empty and the other is non-empty. When namespace is specified in dataSourceRef, dataSource isn't set to the same value and must be empty. There are three important differences between dataSource and dataSourceRef: * While dataSource only allows two specific types of objects, dataSourceRef allows any non-core object, as well as PersistentVolumeClaim objects. * While dataSource ignores disallowed values (dropping them), dataSourceRef preserves all values, and generates an error if a disallowed value is specified. * While dataSource only allows local objects, dataSourceRef allows objects in any namespaces. (Beta) Using this field requires the AnyVolumeDataSource feature gate to be enabled. (Alpha) Using the namespace field of dataSourceRef requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

Property	Type	Description
resources	object	resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources
selector	object	selector is a label query over volumes to consider for binding.
storageClassName	string	storageClassName is the name of the StorageClass required by the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#class-1

Property	Type	Description
volumeAttributesClassName	string	volumeAttributesClassName may be used to set the VolumeAttributesClass used by this claim. If specified, the CSI driver will create or update the volume with the attributes defined in the corresponding VolumeAttributesClass. This has a different purpose than storageClassName, it can be changed after the claim is created. An empty string value means that no VolumeAttributesClass will be applied to the claim but it's not allowed to reset this field to empty string once it is set. If unspecified and the PersistentVolumeClaim is unbound, the default VolumeAttributesClass will be set by the persistentvolume controller if it exists. If the resource referred to by volumeAttributesClass does not exist, this PersistentVolumeClaim will be set to a Pending state, as reflected by the modifyVolumeStatus field, until such as a resource exists. More info: https://kubernetes.io/docs/concepts/storage/volume-attributes-classes/ (Beta) Using this field requires the VolumeAttributesClass feature gate to be enabled (off by default).
volumeMode	string	volumeMode defines what type of volume is required by the claim. Value of Filesystem is implied when not included in claim spec.
volumeName	string	volumeName is the binding reference to the PersistentVolume backing this claim.

8.1.479. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.dataSource

Description

dataSource field can be used to specify either: * An existing VolumeSnapshot object (snapshot.storage.k8s.io/VolumeSnapshot) * An existing PVC (PersistentVolumeClaim) If the provisioner or an external controller can support the specified data source, it will create a new volume based on the contents of the specified data source. When the AnyVolumeDataSource feature gate is enabled, dataSource contents will be copied to dataSourceRef, and dataSourceRef contents will be copied to dataSource when dataSourceRef.namespace is not specified. If the namespace is specified, then dataSourceRef will not be copied to dataSource.

Type

object

Required

- **kind**
- **name**

Property	Type	Description
apiGroup	string	APIGroup is the group for the resource being referenced. If APIGroup is not specified, the specified Kind must be in the core API group. For any other third-party types, APIGroup is required.
kind	string	Kind is the type of resource being referenced
name	string	Name is the name of resource being referenced

8.1.480. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.dataSourceRef

Description

dataSourceRef specifies the object from which to populate the volume with data, if a non-empty volume is desired. This may be any object from a non-empty API group (non core object) or a PersistentVolumeClaim object. When this field is specified, volume binding will only succeed if the type of the specified object matches some installed volume populator or dynamic provisioner. This field will replace the functionality of the dataSource field and as such if both fields are non-empty, they must have the same value. For backwards compatibility, when namespace isn't specified in dataSourceRef, both fields (dataSource and dataSourceRef) will be set to the same value automatically if one of them is empty and the other is non-empty. When namespace is specified in dataSourceRef, dataSource isn't set to the same value and must be empty. There are three important differences between dataSource and dataSourceRef: * While dataSource only allows two specific types of objects, dataSourceRef allows any non-core object, as well as PersistentVolumeClaim objects. * While dataSource ignores disallowed values (dropping them), dataSourceRef preserves all values, and generates an error if a disallowed value is specified. * While dataSource only allows local objects, dataSourceRef allows objects in any namespaces. (Beta) Using this field requires the AnyVolumeDataSource feature gate to be enabled. (Alpha) Using the namespace field of dataSourceRef requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

Type

object

Required

- **kind**
- **name**

Property	Type	Description
apiGroup	string	APIGroup is the group for the resource being referenced. If APIGroup is not specified, the specified Kind must be in the core API group. For any other third-party types, APIGroup is required.
kind	string	Kind is the type of resource being referenced
name	string	Name is the name of resource being referenced
namespace	string	Namespace is the namespace of resource being referenced Note that when a namespace is specified, a gateway.networking.k8s.io/ReferenceGrant object is required in the referent namespace to allow that namespace's owner to accept the reference. See the ReferenceGrant documentation for details. (Alpha) This field requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

8.1.481. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.resources

Description

resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: <https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources>

Type

object

Property	Type	Description
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

8.1.482. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.selector

Description

selector is a label query over volumes to consider for binding.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.483. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.selector.matchExpres

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.484. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.selector.matchExpres**Description**

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.485. .spec.volumes[].fc**Description**

fc represents a Fibre Channel resource that is attached to a kubelet's host machine and then exposed to the pod.

Type

object

Property	Type	Description
fsType	string	fsType is the filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified.
lun	integer	lun is Optional: FC target lun number
readOnly	boolean	readOnly is Optional: Defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.
targetWWNs	array (string)	targetWWNs is Optional: FC target worldwide names (WWNs)
wwids	array (string)	wwids Optional: FC volume world wide identifiers (wwids) Either wwids or combination of targetWWNs and lun must be set, but not both simultaneously.

8.1.486. .spec.volumes[].flexVolume

Description

flexVolume represents a generic volume resource that is provisioned/attached using an exec based plugin. Deprecated: FlexVolume is deprecated. Consider using a CSIDriver instead.

Type

object

Required

- **driver**

Property	Type	Description
driver	string	driver is the name of the driver to use for this volume.

Property	Type	Description
fsType	string	fsType is the filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". The default filesystem depends on FlexVolume script.
options	object (string)	options is Optional: this field holds extra command options if any.
readOnly	boolean	readOnly is Optional: defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.
secretRef	object	secretRef is Optional: secretRef is reference to the secret object containing sensitive information to pass to the plugin scripts. This may be empty if no secret object is specified. If the secret object contains more than one secret, all secrets are passed to the plugin scripts.

8.1.487. .spec.volumes[].flexVolume.secretRef

Description

secretRef is Optional: secretRef is reference to the secret object containing sensitive information to pass to the plugin scripts. This may be empty if no secret object is specified. If the secret object contains more than one secret, all secrets are passed to the plugin scripts.

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

8.1.488. .spec.volumes[].flocker

Description

flocker represents a Flocker volume attached to a kubelet's host machine. This depends on the Flocker control service being running. Deprecated: Flocker is deprecated and the in-tree flocker type is no longer supported.

Type

object

Property	Type	Description
datasetName	string	datasetName is Name of the dataset stored as metadata → name on the dataset for Flocker should be considered as deprecated
datasetUUID	string	datasetUUID is the UUID of the dataset. This is unique identifier of a Flocker dataset

8.1.489. .spec.volumes[].gcePersistentDisk**Description**

gcePersistentDisk represents a GCE Disk resource that is attached to a kubelet's host machine and then exposed to the pod. Deprecated: GCEPersistentDisk is deprecated. All operations for the in-tree gcePersistentDisk type are redirected to the pd.csi.storage.gke.io CSI driver. More info: <https://kubernetes.io/docs/concepts/storage/volumes#gcepersistentdisk>

Type

object

Required

- **pdName**

Property	Type	Description
fsType	string	fsType is filesystem type of the volume that you want to mount. Tip: Ensure that the filesystem type is supported by the host operating system. Examples: "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified. More info: https://kubernetes.io/docs/concepts/storage/volumes#gcepersistentdisk

Property	Type	Description
partition	integer	partition is the partition in the volume that you want to mount. If omitted, the default is to mount by volume name. Examples: For volume /dev/sda1, you specify the partition as "1". Similarly, the volume partition for /dev/sda is "0" (or you can leave the property empty). More info: https://kubernetes.io/docs/concepts/storage/volumes#gcepersistentdisk
pdName	string	pdName is unique name of the PD resource in GCE. Used to identify the disk in GCE. More info: https://kubernetes.io/docs/concepts/storage/volumes#gcepersistentdisk
readOnly	boolean	readOnly here will force the ReadOnly setting in VolumeMounts. Defaults to false. More info: https://kubernetes.io/docs/concepts/storage/volumes#gcepersistentdisk

8.1.490. .spec.volumes[].gitRepo

Description

gitRepo represents a git repository at a particular revision. **Deprecated:** GitRepo is deprecated. To provision a container with a git repo, mount an EmptyDir into an InitContainer that clones the repo using git, then mount the EmptyDir into the Pod's container.

Type

object

Required

- **repository**

Property	Type	Description

Property	Type	Description
directory	string	directory is the target directory name. Must not contain or start with '..'. If '.' is supplied, the volume directory will be the git repository. Otherwise, if specified, the volume will contain the git repository in the subdirectory with the given name.
repository	string	repository is the URL
revision	string	revision is the commit hash for the specified revision.

8.1.491. .spec.volumes[].glusterfs

Description

glusterfs represents a Glusterfs mount on the host that shares a pod's lifetime. Deprecated: Glusterfs is deprecated and the in-tree glusterfs type is no longer supported. More info: <https://examples.k8s.io/volumes/glusterfs/README.md>

Type

object

Required

- **endpoints**
- **path**

Property	Type	Description
endpoints	string	endpoints is the endpoint name that details Glusterfs topology. More info: https://examples.k8s.io/volumes/glusterfs/README.md#create-a-pod
path	string	path is the Glusterfs volume path. More info: https://examples.k8s.io/volumes/glusterfs/README.md#create-a-pod

Property	Type	Description
readOnly	boolean	readOnly here will force the Glusterfs volume to be mounted with read-only permissions. Defaults to false. More info: https://examples.k8s.io/volumes/glusterfs/README.md#create-a-pod

8.1.492. .spec.volumes[].hostPath

Description

hostPath represents a pre-existing file or directory on the host machine that is directly exposed to the container. This is generally used for system agents or other privileged things that are allowed to see the host machine. Most containers will NOT need this. More info:

<https://kubernetes.io/docs/concepts/storage/volumes#hostpath>

Type

object

Required

- **path**

Property	Type	Description
path	string	path of the directory on the host. If the path is a symlink, it will follow the link to the real path. More info: https://kubernetes.io/docs/concepts/storage/volumes#hostpath
type	string	type for HostPath Volume Defaults to "" More info: https://kubernetes.io/docs/concepts/storage/volumes#hostpath

8.1.493. .spec.volumes[].image

Description

image represents an OCI object (a container image or artifact) pulled and mounted on the kubelet's host machine. The volume is resolved at pod startup depending on which PullPolicy value is provided:

- Always: the kubelet always attempts to pull the reference. Container creation will fail if the pull fails.
- Never: the kubelet never pulls the reference and only uses a local image or artifact. Container creation will fail if the reference isn't present.

- **IfNotPresent**: the kubelet pulls if the reference isn't already present on disk. Container creation will fail if the reference isn't present and the pull fails.

The volume gets re-resolved if the pod gets deleted and recreated, which means that new remote content will become available on pod recreation. A failure to resolve or pull the image during pod startup will block containers from starting and may add significant latency. Failures will be retried using normal volume backoff and will be reported on the pod reason and message. The types of objects that may be mounted by this volume are defined by the container runtime implementation on a host machine and at minimum must include all valid types supported by the container image field. The OCI object gets mounted in a single directory (`spec.containers[].volumeMounts.mountPath`) **by merging the manifest layers in the same way as for container images. The volume will be mounted read-only (ro) and non-executable files (noexec). Sub path mounts for containers are not supported (`spec.containers[].volumeMounts.subpath`) before 1.33.** The field `spec.securityContext.fsGroupChangePolicy` has no effect on this volume type.

Type

object

Property	Type	Description
pullPolicy	string	Policy for pulling OCI objects. Possible values are: Always : the kubelet always attempts to pull the reference. Container creation will fail if the pull fails. Never : the kubelet never pulls the reference and only uses a local image or artifact. Container creation will fail if the reference isn't present. IfNotPresent : the kubelet pulls if the reference isn't already present on disk. Container creation will fail if the reference isn't present and the pull fails. Defaults to Always if :latest tag is specified, or IfNotPresent otherwise.

Property	Type	Description
reference	string	Required: Image or artifact reference to be used. Behaves in the same way as pod.spec.containers[*].image. Pull secrets will be assembled in the same way as for the container image by looking up node credentials, SA image pull secrets, and pod spec image pull secrets. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.

8.1.494. .spec.volumes[].iscsi

Description

iscsi represents an iSCSI Disk resource that is attached to a kubelet's host machine and then exposed to the pod. More info: <https://examples.k8s.io/volumes/iscsi/README.md>

Type

object

Required

- **iqn**
- **lun**
- **targetPortal**

Property	Type	Description
chapAuthDiscovery	boolean	chapAuthDiscovery defines whether support iSCSI Discovery CHAP authentication
chapAuthSession	boolean	chapAuthSession defines whether support iSCSI Session CHAP authentication

Property	Type	Description
fsType	string	fsType is the filesystem type of the volume that you want to mount. Tip: Ensure that the filesystem type is supported by the host operating system. Examples: "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified. More info: https://kubernetes.io/docs/concepts/storage/volumes#iscsi
initiatorName	string	initiatorName is the custom iSCSI Initiator Name. If initiatorName is specified with iscsiInterface simultaneously, new iSCSI interface <target portal>:<volume name> will be created for the connection.
iqn	string	iqn is the target iSCSI Qualified Name.
iscsilInterface	string	iscsilInterface is the interface Name that uses an iSCSI transport. Defaults to 'default' (tcp).
lun	integer	lun represents iSCSI Target Lun number.
portals	array (string)	portals is the iSCSI Target Portal List. The portal is either an IP or ip_addr:port if the port is other than default (typically TCP ports 860 and 3260).
readOnly	boolean	readOnly here will force the ReadOnly setting in VolumeMounts. Defaults to false.
secretRef	object	secretRef is the CHAP Secret for iSCSI target and initiator authentication
targetPortal	string	targetPortal is iSCSI Target Portal. The Portal is either an IP or ip_addr:port if the port is other than default (typically TCP ports 860 and 3260).

8.1.495. .spec.volumes[].iscsi.secretRef

Description

secretRef is the CHAP Secret for iSCSI target and initiator authentication

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

8.1.496. .spec.volumes[].nfs

Description

nfs represents an NFS mount on the host that shares a pod's lifetime More info:

<https://kubernetes.io/docs/concepts/storage/volumes#nfs>

Type

object

Required

- **path**
- **server**

Property	Type	Description
path	string	path that is exported by the NFS server. More info: https://kubernetes.io/docs/concepts/storage/volumes#nfs
readOnly	boolean	readOnly here will force the NFS export to be mounted with read-only permissions. Defaults to false. More info: https://kubernetes.io/docs/concepts/storage/volumes#nfs

Property	Type	Description
server	string	server is the hostname or IP address of the NFS server. More info: https://kubernetes.io/docs/concepts/storage/volumes#nfs

8.1.497. .spec.volumes[].persistentVolumeClaim

Description

`persistentVolumeClaimVolumeSource` represents a reference to a `PersistentVolumeClaim` in the same namespace. More info: <https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims>

Type

object

Required

- **claimName**

Property	Type	Description
claimName	string	claimName is the name of a <code>PersistentVolumeClaim</code> in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
readOnly	boolean	readOnly Will force the <code>ReadOnly</code> setting in <code>VolumeMounts</code> . Default false.

8.1.498. .spec.volumes[].photonPersistentDisk

Description

`photonPersistentDisk` represents a `PhotonController` persistent disk attached and mounted on kubelets host machine. Deprecated: `PhotonPersistentDisk` is deprecated and the in-tree `photonPersistentDisk` type is no longer supported.

Type

object

Required

- **pdID**

Property	Type	Description
fsType	string	fsType is the filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified.
pdID	string	pdID is the ID that identifies Photon Controller persistent disk

8.1.499. .spec.volumes[].portworxVolume

Description

portworxVolume represents a portworx volume attached and mounted on kubelets host machine.
 Deprecated: PortworxVolume is deprecated. All operations for the in-tree portworxVolume type are redirected to the pxd.portworx.com CSI driver when the CSIMigrationPortworx feature-gate is on.

Type

object

Required

- **volumeID**

Property	Type	Description
fsType	string	fSType represents the filesystem type to mount Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs". Implicitly inferred to be "ext4" if unspecified.
readOnly	boolean	readOnly defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.
volumeID	string	volumeID uniquely identifies a Portworx volume

8.1.500. .spec.volumes[].projected

Description

projected items for all in one resources secrets, configmaps, and downward API

Type

object

Property	Type	Description
defaultMode	integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	array	sources is the list of volume projections. Each entry in this list handles one source.
sources[]	object	Projection that may be projected along with other supported volume types. Exactly one of these fields must be set.

8.1.501. .spec.volumes[].projected.sources

Description

sources is the list of volume projections. Each entry in this list handles one source.

Type

array

8.1.502. .spec.volumes[].projected.sources[]

Description

Projection that may be projected along with other supported volume types. Exactly one of these fields must be set.

Type

object

Property	Type	Description

Property	Type	Description
clusterTrustBundle	object	ClusterTrustBundle allows a pod to access the .spec.trustBundle field of ClusterTrustBundle objects in an auto-updating file. Alpha, gated by the ClusterTrustBundleProjection feature gate. ClusterTrustBundle objects can either be selected by name, or by the combination of signer name and a label selector. Kubelet performs aggressive normalization of the PEM contents written into the pod filesystem. Esoteric PEM features such as inter-block comments and block headers are stripped. Certificates are deduplicated. The ordering of certificates within the file is arbitrary, and Kubelet may change the order over time.
configMap	object	configMap information about the configMap data to project
downwardAPI	object	downwardAPI information about the downwardAPI data to project
secret	object	secret information about the secret data to project
serviceAccountToken	object	serviceAccountToken is information about the serviceAccountToken data to project

8.1.503. **.spec.volumes[].projected.sources[].clusterTrustBundle**

Description

ClusterTrustBundle allows a pod to access the **.spec.trustBundle** field of ClusterTrustBundle objects in an auto-updating file.

Alpha, gated by the ClusterTrustBundleProjection feature gate.

ClusterTrustBundle objects can either be selected by name, or by the combination of signer name and a label selector.

Kubelet performs aggressive normalization of the PEM contents written into the pod filesystem. Esoteric PEM features such as inter-block comments and block headers are stripped. Certificates are deduplicated. The ordering of certificates within the file is arbitrary, and Kubelet may change the order over time.

Type

object

Required

- **path**

Property	Type	Description
labelSelector	object	Select all ClusterTrustBundles that match this label selector. Only has effect if signerName is set. Mutually-exclusive with name. If unset, interpreted as "match nothing". If set but empty, interpreted as "match everything".
name	string	Select a single ClusterTrustBundle by object name. Mutually-exclusive with signerName and labelSelector.
optional	boolean	If true, don't block pod startup if the referenced ClusterTrustBundle(s) aren't available. If using name, then the named ClusterTrustBundle is allowed not to exist. If using signerName, then the combination of signerName and labelSelector is allowed to match zero ClusterTrustBundles.
path	string	Relative path from the volume root to write the bundle.
signerName	string	Select all ClusterTrustBundles that match this signer name. Mutually-exclusive with name. The contents of all selected ClusterTrustBundles will be unified and deduplicated.

8.1.504. .spec.volumes[].projected.sources[].clusterTrustBundle.labelSelector

Description

Select all ClusterTrustBundles that match this label selector. Only has effect if signerName is set. Mutually-exclusive with name. If unset, interpreted as "match nothing". If set but empty, interpreted as "match everything".

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

8.1.505. .spec.volumes[].projected.sources[].clusterTrustBundle.labelSelector.matchE

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

8.1.506. .spec.volumes[].projected.sources[].clusterTrustBundle.labelSelector.matchE

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

8.1.507. .spec.volumes[].projected.sources[].configMap

Description

configMap information about the configMap data to project

Type

object

Property	Type	Description
items	array	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.
items[]	object	Maps a string key to a path within a volume.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	optional specify whether the ConfigMap or its keys must be defined

8.1.508. .spec.volumes[].projected.sources[].configMap.items

Description

items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.

Type

array

8.1.509. .spec.volumes[].projected.sources[].configMap.items[]

Description

Maps a string key to a path within a volume.

Type

object

Required

- **key**
- **path**

Property	Type	Description
key	string	key is the key to project.

Property	Type	Description
mode	integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	string	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

8.1.510. .spec.volumes[].projected.sources[].downwardAPI

Description

downwardAPI information about the downwardAPI data to project

Type

object

Property	Type	Description
items	array	Items is a list of DownwardAPIVolume file
items[]	object	DownwardAPIVolumeFile represents information to create the file containing the pod field

8.1.511. .spec.volumes[].projected.sources[].downwardAPI.items

Description

Items is a list of DownwardAPIVolume file

Type

array

8.1.512. .spec.volumes[].projected.sources[].downwardAPI.items[]

Description

DownwardAPIVolumeFile represents information to create the file containing the pod field

Type

object

Required

- **path**

Property	Type	Description
fieldRef	object	Required: Selects a field of the pod: only annotations, labels, name, namespace and uid are supported.
mode	integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	string	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

8.1.513. .spec.volumes[].projected.sources[].downwardAPI.items[].fieldRef**Description**

Required: Selects a field of the pod: only annotations, labels, name, namespace and uid are supported.

Type

object**Required**

- **fieldPath**

Property	Type	Description
apiVersion	string	Version of the schema the FieldPath is written in terms of, defaults to "v1".
fieldPath	string	Path of the field to select in the specified API version.

8.1.514. .spec.volumes[].projected.sources[].downwardAPI.items[].resourceFieldRef**Description**

Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Type**object****Required**

- **resource**

Property	Type	Description
containerName	string	Container name: required for volumes, optional for env vars
divisor	integer-or-string	Specifies the output format of the exposed resources, defaults to "1"
resource	string	Required: resource to select

8.1.515. .spec.volumes[].projected.sources[].secret**Description**

secret information about the secret data to project

Type**object**

Property	Type	Description
items	array	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.
items[]	object	Maps a string key to a path within a volume.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	optional field specify whether the Secret or its key must be defined

8.1.516. .spec.volumes[].projected.sources[].secret.items

Description

items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.

Type

array

8.1.517. .spec.volumes[].projected.sources[].secret.items[]

Description

Maps a string key to a path within a volume.

Type

object**Required**

- **key**
- **path**

Property	Type	Description
key	string	key is the key to project.
mode	integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	string	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

8.1.518. .spec.volumes[].projected.sources[].serviceAccountToken**Description**

serviceAccountToken is information about the serviceAccountToken data to project

Type**object****Required**

- **path**

Property	Type	Description

Property	Type	Description
audience	string	audience is the intended audience of the token. A recipient of a token must identify itself with an identifier specified in the audience of the token, and otherwise should reject the token. The audience defaults to the identifier of the apiserver.
expirationSeconds	integer	expirationSeconds is the requested duration of validity of the service account token. As the token approaches expiration, the kubelet volume plugin will proactively rotate the service account token. The kubelet will start trying to rotate the token if the token is older than 80 percent of its time to live or if the token is older than 24 hours. Defaults to 1 hour and must be at least 10 minutes.
path	string	path is the path relative to the mount point of the file to project the token into.

8.1.519. .spec.volumes[].quobyte

Description

quobyte represents a Quobyte mount on the host that shares a pod's lifetime. Deprecated: Quobyte is deprecated and the in-tree quobyte type is no longer supported.

Type

object

Required

- **registry**
- **volume**

Property	Type	Description
group	string	group to map volume access to Default is no group

Property	Type	Description
readOnly	boolean	readOnly here will force the Quobyte volume to be mounted with read-only permissions. Defaults to false.
registry	string	registry represents a single or multiple Quobyte Registry services specified as a string as host:port pair (multiple entries are separated with commas) which acts as the central registry for volumes
tenant	string	tenant owning the given Quobyte volume in the Backend Used with dynamically provisioned Quobyte volumes, value is set by the plugin
user	string	user to map volume access to Defaults to serviceaccount user
volume	string	volume is a string that references an already created Quobyte volume by name.

8.1.520. .spec.volumes[].rbd

Description

rbd represents a Rados Block Device mount on the host that shares a pod's lifetime. Deprecated: RBD is deprecated and the in-tree rbd type is no longer supported. More info:

<https://examples.k8s.io/volumes/rbd/README.md>

Type

object

Required

- **image**
- **monitors**

Property	Type	Description

Property	Type	Description
fsType	string	fsType is the filesystem type of the volume that you want to mount. Tip: Ensure that the filesystem type is supported by the host operating system. Examples: "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified. More info: https://kubernetes.io/docs/concepts/storage/volumes#rbd
image	string	image is the rados image name. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it
keyring	string	keyring is the path to key ring for RBDUser. Default is /etc/ceph/keyring. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it
monitors	array (string)	monitors is a collection of Ceph monitors. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it
pool	string	pool is the rados pool name. Default is rbd. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it
readOnly	boolean	readOnly here will force the ReadOnly setting in VolumeMounts. Defaults to false. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it
secretRef	object	secretRef is name of the authentication secret for RBDUser. If provided overrides keyring. Default is nil. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it
user	string	user is the rados user name. Default is admin. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it

8.1.521. .spec.volumes[].rbd.secretRef

Description

secretRef is name of the authentication secret for RBDUser. If provided overrides keyring. Default is nil. More info: <https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it>

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

8.1.522. .spec.volumes[].scaleIO

Description

scaleIO represents a ScaleIO persistent volume attached and mounted on Kubernetes nodes.
Deprecated: ScaleIO is deprecated and the in-tree scaleIO type is no longer supported.

Type

object

Required

- **gateway**
- **secretRef**
- **system**

Property	Type	Description
fsType	string	fsType is the filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". Default is "xfs".
gateway	string	gateway is the host address of the ScaleIO API Gateway.

Property	Type	Description
protectionDomain	string	protectionDomain is the name of the ScaleIO Protection Domain for the configured storage.
readOnly	boolean	readOnly Defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.
secretRef	object	secretRef references to the secret for ScaleIO user and other sensitive information. If this is not provided, Login operation will fail.
sslEnabled	boolean	sslEnabled Flag enable/disable SSL communication with Gateway, default false
storageMode	string	storageMode indicates whether the storage for a volume should be ThickProvisioned or ThinProvisioned. Default is ThinProvisioned.
storagePool	string	storagePool is the ScaleIO Storage Pool associated with the protection domain.
system	string	system is the name of the storage system as configured in ScaleIO.
volumeName	string	volumeName is the name of a volume already created in the ScaleIO system that is associated with this volume source.

8.1.523. .spec.volumes[].scaleIO.secretRef

Description

secretRef references to the secret for ScaleIO user and other sensitive information. If this is not provided, Login operation will fail.

Type

object

Property	Type	Description

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

8.1.524. .spec.volumes[].secret

Description

secret represents a secret that should populate this volume. More info: <https://kubernetes.io/docs/concepts/storage/volumes#secret>

Type

object

Property	Type	Description
defaultMode	integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Property	Type	Description
items	array	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.
items[]	object	Maps a string key to a path within a volume.
optional	boolean	optional field specify whether the Secret or its keys must be defined
secretName	string	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

8.1.525. .spec.volumes[].secret.items

Description

items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.

Type

array

8.1.526. .spec.volumes[].secret.items[]

Description

Maps a string key to a path within a volume.

Type

object

Required

- **key**
- **path**

Property	Type	Description
key	string	key is the key to project.
mode	integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	string	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

8.1.527. .spec.volumes[].storageos

Description

storageOS represents a StorageOS volume attached and mounted on Kubernetes nodes.

Deprecated: StorageOS is deprecated and the in-tree storageos type is no longer supported.

Type

object

Property	Type	Description
fsType	string	fsType is the filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified.

Property	Type	Description
readOnly	boolean	readOnly defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.
secretRef	object	secretRef specifies the secret to use for obtaining the StorageOS API credentials. If not specified, default values will be attempted.
volumeName	string	volumeName is the human-readable name of the StorageOS volume. Volume names are only unique within a namespace.
volumeNamespace	string	volumeNamespace specifies the scope of the volume within StorageOS. If no namespace is specified then the Pod's namespace will be used. This allows the Kubernetes name scoping to be mirrored within StorageOS for tighter integration. Set VolumeName to any name to override the default behaviour. Set to "default" if you are not using namespaces within StorageOS. Namespaces that do not pre-exist within StorageOS will be created.

8.1.528. .spec.volumes[].storageos.secretRef

Description

secretRef specifies the secret to use for obtaining the StorageOS API credentials. If not specified, default values will be attempted.

Type

object

Property	Type	Description

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

8.1.529. .spec.volumes[].vsphereVolume

Description

vsphereVolume represents a vSphere volume attached and mounted on kubelets host machine.
 Deprecated: VsphereVolume is deprecated. All operations for the in-tree vsphereVolume type are redirected to the csi.vsphere.vmware.com CSI driver.

Type

object

Required

- **volumePath**

Property	Type	Description
fsType	string	fsType is filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified.
storagePolicyID	string	storagePolicyID is the storage Policy Based Management (SPBM) profile ID associated with the StoragePolicyName.
storagePolicyName	string	storagePolicyName is the storage Policy Based Management (SPBM) profile name.
volumePath	string	volumePath is the path that identifies vSphere volume vmdk

8.1.530. .spec.web

Description

Defines the configuration of the Prometheus web server.

Type

object

Property	Type	Description
httpConfig	object	Defines HTTP parameters for web server.
maxConnections	integer	Defines the maximum number of simultaneous connections A zero value means that Prometheus doesn't accept any incoming connection.
pageTitle	string	The prometheus web page title.
tlsConfig	object	Defines the TLS parameters for HTTPS.

8.1.531. .spec.web.httpConfig**Description**

Defines HTTP parameters for web server.

Type

object

Property	Type	Description
headers	object	List of headers that can be added to HTTP responses.
http2	boolean	Enable HTTP/2 support. Note that HTTP/2 is only supported with TLS. When TLSConfig is not configured, HTTP/2 will be disabled. Whenever the value of the field changes, a rolling update will be triggered.

8.1.532. .spec.web.httpConfig.headers**Description**

List of headers that can be added to HTTP responses.

Type

object

Property	Type	Description
contentSecurityPolicy	string	Set the Content-Security-Policy header to HTTP responses. Unset if blank.
strictTransportSecurity	string	Set the Strict-Transport-Security header to HTTP responses. Unset if blank. Please make sure that you use this with care as this header might force browsers to load Prometheus and the other applications hosted on the same domain and subdomains over HTTPS. https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/Strict-Transport-Security
xContentTypeOptions	string	Set the X-Content-Type-Options header to HTTP responses. Unset if blank. Accepted value is nosniff. https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-Content-Type-Options
xFrameOptions	string	Set the X-Frame-Options header to HTTP responses. Unset if blank. Accepted values are deny and sameorigin. https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-Frame-Options
xXSSProtection	string	Set the X-XSS-Protection header to all responses. Unset if blank. https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-XSS-Protection

8.1.533. .spec.web.tlsConfig

Description

Defines the TLS parameters for HTTPS.

Type

object

Property	Type	Description

Property	Type	Description
cert	object	Secret or ConfigMap containing the TLS certificate for the web server. Either keySecret or keyFile must be defined. It is mutually exclusive with certFile.
certFile	string	Path to the TLS certificate file in the container for the web server. Either keySecret or keyFile must be defined. It is mutually exclusive with cert.
cipherSuites	array (string)	List of supported cipher suites for TLS versions up to TLS 1.2. If not defined, the Go default cipher suites are used. Available cipher suites are documented in the Go documentation: https://golang.org/pkg/crypto/tls/#pkg-constants
clientAuthType	string	The server policy for client TLS authentication. For more detail on clientAuth options: https://golang.org/pkg/crypto/tls/#ClientAuthType
clientCAFile	string	Path to the CA certificate file for client certificate authentication to the server. It is mutually exclusive with client_ca.

Property	Type	Description
client_ca	object	Secret or ConfigMap containing the CA certificate for client certificate authentication to the server. It is mutually exclusive with clientCAFile.
curvePreferences	array (string)	Elliptic curves that will be used in an ECDHE handshake, in preference order. Available curves are documented in the Go documentation: https://golang.org/pkg/crypto/tls/#CurveID
keyFile	string	Path to the TLS private key file in the container for the web server. If defined, either cert or certFile must be defined. It is mutually exclusive with keySecret.
keySecret	object	Secret containing the TLS private key for the web server. Either cert or certFile must be defined. It is mutually exclusive with keyFile.
maxVersion	string	Maximum TLS version that is acceptable.
minVersion	string	Minimum TLS version that is acceptable.

Property	Type	Description
preferServerCipherSuites	boolean	Controls whether the server selects the client's most preferred cipher suite, or the server's most preferred cipher suite. If true then the server's preference, as expressed in the order of elements in cipherSuites, is used.

8.1.534. .spec.web.tlsConfig.cert

Description

Secret or ConfigMap containing the TLS certificate for the web server.
Either **keySecret** or **keyFile** must be defined.

It is mutually exclusive with **certFile**.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.535. .spec.web.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.536. .spec.web.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.537. .spec.web.tlsConfig.client_ca

Description

Secret or ConfigMap containing the CA certificate for client certificate authentication to the server. It is mutually exclusive with **clientCAFile**.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

8.1.538. .spec.web.tlsConfig.client_ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

8.1.539. .spec.web.tlsConfig.client_ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.540. .spec.web.tlsConfig.keySecret

Description

Secret containing the TLS private key for the web server.
Either **cert** or **certFile** must be defined.

It is mutually exclusive with **keyFile**.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

8.1.541. .status

Description

Most recent observed status of the Prometheus cluster. Read-only. More info:

<https://github.com/kubernetes/community/blob/master/contributors/devel/sig-architecture/api-conventions.md#spec-and-status>

Type

object

Required

- **availableReplicas**
- **paused**
- **replicas**
- **unavailableReplicas**
- **updatedReplicas**

Property	Type	Description
availableReplicas	integer	Total number of available pods (ready for at least minReadySeconds) targeted by this Prometheus deployment.
conditions	array	The current state of the Prometheus deployment.

Property	Type	Description
conditions[]	object	Condition represents the state of the resources associated with the Prometheus, Alertmanager or ThanosRuler resource.
paused	boolean	Represents whether any actions on the underlying managed objects are being performed. Only delete actions will be performed.
replicas	integer	Total number of non-terminated pods targeted by this Prometheus deployment (their labels match the selector).
selector	string	The selector used to match the pods targeted by this Prometheus resource.
shardStatuses	array	The list has one entry per shard. Each entry provides a summary of the shard status.
shardStatuses[]	object	
shards	integer	Shards is the most recently observed number of shards.
unavailableReplicas	integer	Total number of unavailable pods targeted by this Prometheus deployment.
updatedReplicas	integer	Total number of non-terminated pods targeted by this Prometheus deployment that have the desired version spec.

8.1.542. .status.conditions

Description

The current state of the Prometheus deployment.

Type

array

8.1.543. .status.conditions[]

Description

Condition represents the state of the resources associated with the Prometheus, Alertmanager or ThanosRuler resource.

Type

object

Required

- **lastTransitionTime**
- **status**
- **type**

Property	Type	Description
lastTransitionTime	string	lastTransitionTime is the time of the last update to the current status property.
message	string	Human-readable message indicating details for the condition's last transition.
observedGeneration	integer	ObservedGeneration represents the <code>.metadata.generation</code> that the condition was set based upon. For instance, if <code>.metadata.generation</code> is currently 12, but the <code>.status.conditions[].observedGeneration</code> is 9, the condition is out of date with respect to the current state of the instance.
reason	string	Reason for the condition's last transition.
status	string	Status of the condition.
type	string	Type of the condition being reported.

8.1.544. `.status.shardStatuses`**Description**

The list has one entry per shard. Each entry provides a summary of the shard status.

Type

array

8.1.545. .status.shardStatuses[]

Description

Type

object

Required

- **availableReplicas**
- **replicas**
- **shardID**
- **unavailableReplicas**
- **updatedReplicas**

Property	Type	Description
availableReplicas	integer	Total number of available pods (ready for at least minReadySeconds) targeted by this shard.
replicas	integer	Total number of pods targeted by this shard.
shardID	string	Identifier of the shard.
unavailableReplicas	integer	Total number of unavailable pods targeted by this shard.
updatedReplicas	integer	Total number of non-terminated pods targeted by this shard that have the desired spec.

8.2. API ENDPOINTS

The following API endpoints are available:

- **/apis/monitoring.coreos.com/v1/prometheuses**
 - **GET**: list objects of kind Prometheus
- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/prometheuses**
 - **DELETE**: delete collection of Prometheus
 - **GET**: list objects of kind Prometheus

- **POST**: create Prometheus
- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/prometheuses/{name}**
 - **DELETE**: delete Prometheus
 - **GET**: read the specified Prometheus
 - **PATCH**: partially update the specified Prometheus
 - **PUT**: replace the specified Prometheus
- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/prometheuses/{name}/scale**
 - **GET**: read scale of the specified Prometheus
 - **PATCH**: partially update scale of the specified Prometheus
 - **PUT**: replace scale of the specified Prometheus
- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/prometheuses/{name}/status**
 - **GET**: read status of the specified Prometheus
 - **PATCH**: partially update status of the specified Prometheus
 - **PUT**: replace status of the specified Prometheus

8.2.1. /apis/monitoring.coreos.com/v1/prometheuses

HTTP method

GET

Description

list objects of kind Prometheus

Table 8.1. HTTP responses

HTTP code	Reponse body
200 - OK	PrometheusList schema
401 - Unauthorized	Empty

8.2.2. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/prometheuses

HTTP method

DELETE

Description

delete collection of Prometheus

Table 8.2. HTTP responses

HTTP code	Reponse body
200 - OK	Status schema
401 - Unauthorized	Empty

HTTP method**GET****Description**

list objects of kind Prometheus

Table 8.3. HTTP responses

HTTP code	Reponse body
200 - OK	PrometheusList schema
401 - Unauthorized	Empty

HTTP method**POST****Description**

create Prometheus

Table 8.4. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Parameter	Type	Description
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 8.5. Body parameters

Parameter	Type	Description
body	Prometheus schema	

Table 8.6. HTTP responses

HTTP code	Response body
200 - OK	Prometheus schema
201 - Created	Prometheus schema
202 - Accepted	Prometheus schema
401 - Unauthorized	Empty

8.2.3. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/prometheuses/{na

Table 8.7. Global path parameters

Parameter	Type	Description
name	string	name of the Prometheus

HTTP method**DELETE****Description**

delete Prometheus

Table 8.8. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Table 8.9. HTTP responses

HTTP code	Reponse body
200 - OK	Status schema
202 - Accepted	Status schema
401 - Unauthorized	Empty

HTTP method**GET****Description**

read the specified Prometheus

Table 8.10. HTTP responses

HTTP code	Reponse body
200 - OK	Prometheus schema
401 - Unauthorized	Empty

HTTP method**PATCH****Description**

partially update the specified Prometheus

Table 8.11. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 8.12. HTTP responses

HTTP code	Response body
200 - OK	Prometheus schema
401 - Unauthorized	Empty

HTTP method**PUT****Description**

replace the specified Prometheus

Table 8.13. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Parameter	Type	Description
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 8.14. Body parameters

Parameter	Type	Description
body	Prometheus schema	

Table 8.15. HTTP responses

HTTP code	Response body
200 - OK	Prometheus schema
201 - Created	Prometheus schema
401 - Unauthorized	Empty

8.2.4. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/prometheuses/{na

Table 8.16. Global path parameters

Parameter	Type	Description
name	string	name of the Prometheus

HTTP method

GET

Description

read scale of the specified Prometheus

Table 8.17. HTTP responses

HTTP code	Response body
200 - OK	Scale schema
401 - Unauthorized	Empty

HTTP method**PATCH****Description**

partially update scale of the specified Prometheus

Table 8.18. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 8.19. HTTP responses

HTTP code	Response body
200 - OK	Scale schema
401 - Unauthorized	Empty

HTTP method**PUT****Description**

replace scale of the specified Prometheus

Table 8.20. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 8.21. Body parameters

Parameter	Type	Description
body	Scale schema	

Table 8.22. HTTP responses

HTTP code	Reponse body
200 - OK	Scale schema
201 - Created	Scale schema
401 - Unauthorized	Empty

8.2.5. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/prometheuses/{na

Table 8.23. Global path parameters

Parameter	Type	Description
name	string	name of the Prometheus

HTTP method

GET

Description

read status of the specified Prometheus

Table 8.24. HTTP responses

HTTP code	Reponse body
200 - OK	Prometheus schema
401 - Unauthorized	Empty

HTTP method

PATCH

Description

partially update status of the specified Prometheus

Table 8.25. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Parameter	Type	Description
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 8.26. HTTP responses

HTTP code	Response body
200 - OK	Prometheus schema
401 - Unauthorized	Empty

HTTP method**PUT****Description**

replace status of the specified Prometheus

Table 8.27. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Parameter	Type	Description
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 8.28. Body parameters

Parameter	Type	Description
body	Prometheus schema	

Table 8.29. HTTP responses

HTTP code	Reponse body
200 - OK	Prometheus schema
201 - Created	Prometheus schema
401 - Unauthorized	Empty

CHAPTER 9. PROMETHEUSRULE [MONITORING.COREOS.COM/V1]

Description

The **PrometheusRule** custom resource definition (CRD) defines [alerting] (https://prometheus.io/docs/prometheus/latest/configuration/alerting_rules/) and [recording] (https://prometheus.io/docs/prometheus/latest/configuration/recording_rules/) rules to be evaluated by **Prometheus** or **ThanosRuler** objects.

Prometheus and **ThanosRuler** objects select **PrometheusRule** objects using label and namespace selectors.

Type

object

Required

- **spec**

9.1. SPECIFICATION

Property	Type	Description
apiVersion	string	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	string	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	ObjectMeta	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Property	Type	Description
spec	object	Specification of desired alerting rule definitions for Prometheus.

9.1.1. .spec

Description

Specification of desired alerting rule definitions for Prometheus.

Type

object

Property	Type	Description
groups	array	Content of Prometheus rule file
groups[]	object	RuleGroup is a list of sequentially evaluated recording and alerting rules.

9.1.2. .spec.groups

Description

Content of Prometheus rule file

Type

array

9.1.3. .spec.groups[]

Description

RuleGroup is a list of sequentially evaluated recording and alerting rules.

Type

object

Required

- **name**

Property	Type	Description
interval	string	Interval determines how often rules in the group are evaluated.

Property	Type	Description
labels	object (string)	Labels to add or overwrite before storing the result for its rules. The labels defined at the rule level take precedence. It requires Prometheus >= 3.0.0. The field is ignored for Thanos Ruler.
limit	integer	Limit the number of alerts an alerting rule and series a recording rule can produce. Limit is supported starting with Prometheus >= 2.31 and Thanos Ruler >= 0.24.
name	string	Name of the rule group.
partial_response_strategy	string	PartialResponseStrategy is only used by ThanosRuler and will be ignored by Prometheus instances. More info: https://github.com/thanos-io/thanos/blob/main/docs/components/rule.md#partial-response
query_offset	string	Defines the offset the rule evaluation timestamp of this particular group by the specified duration into the past. It requires Prometheus >= v2.53.0. It is not supported for ThanosRuler.
rules	array	List of alerting and recording rules.
rules[]	object	Rule describes an alerting or recording rule See Prometheus documentation: [alerting] (https://www.prometheus.io/docs/prometheus/latest/configuration/alerting_rules/) or [recording] (https://www.prometheus.io/docs/prometheus/latest/configuration/recording_rules/#recording-rules) rule

9.1.4. .spec.groups[].rules

Description

List of alerting and recording rules.

Type

array

9.1.5. .spec.groups[].rules[]**Description**

Rule describes an alerting or recording rule See Prometheus documentation: [alerting] (https://www.prometheus.io/docs/prometheus/latest/configuration/alerting_rules/) or [recording] (https://www.prometheus.io/docs/prometheus/latest/configuration/recording_rules/#recording-rules) rule

Type

object

Required

- **expr**

Property	Type	Description
alert	string	Name of the alert. Must be a valid label value. Only one of record and alert must be set.
annotations	object (string)	Annotations to add to each alert. Only valid for alerting rules.
expr	integer-or-string	PromQL expression to evaluate.
for	string	Alerts are considered firing once they have been returned for this long.
keep_firing_for	string	KeepFiringFor defines how long an alert will continue firing after the condition that triggered it has cleared.
labels	object (string)	Labels to add or overwrite.
record	string	Name of the time series to output to. Must be a valid metric name. Only one of record and alert must be set.

9.2. API ENDPOINTS

The following API endpoints are available:

- **/apis/monitoring.coreos.com/v1/prometheusrules**
 - **GET**: list objects of kind PrometheusRule
- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/prometheusrules**
 - **DELETE**: delete collection of PrometheusRule
 - **GET**: list objects of kind PrometheusRule
 - **POST**: create a PrometheusRule
- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/prometheusrules/{name}**
 - **DELETE**: delete a PrometheusRule
 - **GET**: read the specified PrometheusRule
 - **PATCH**: partially update the specified PrometheusRule
 - **PUT**: replace the specified PrometheusRule

9.2.1. /apis/monitoring.coreos.com/v1/prometheusrules

HTTP method

GET

Description

list objects of kind PrometheusRule

Table 9.1. HTTP responses

HTTP code	Reponse body
200 - OK	PrometheusRuleList schema
401 - Unauthorized	Empty

9.2.2. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/prometheusrules

HTTP method

DELETE

Description

delete collection of PrometheusRule

Table 9.2. HTTP responses

HTTP code	Reponse body
200 - OK	Status schema

HTTP code	Reponse body
401 - Unauthorized	Empty

HTTP method**GET****Description**

list objects of kind PrometheusRule

Table 9.3. HTTP responses

HTTP code	Reponse body
200 - OK	PrometheusRuleList schema
401 - Unauthorized	Empty

HTTP method**POST****Description**

create a PrometheusRule

Table 9.4. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Parameter	Type	Description
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 9.5. Body parameters

Parameter	Type	Description
body	PrometheusRule schema	

Table 9.6. HTTP responses

HTTP code	Response body
200 - OK	PrometheusRule schema
201 - Created	PrometheusRule schema
202 - Accepted	PrometheusRule schema
401 - Unauthorized	Empty

9.2.3. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/prometheusrules/{

Table 9.7. Global path parameters

Parameter	Type	Description
name	string	name of the PrometheusRule

HTTP method**DELETE****Description**

delete a PrometheusRule

Table 9.8. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Table 9.9. HTTP responses

HTTP code	Reponse body
200 - OK	Status schema
202 - Accepted	Status schema
401 - Unauthorized	Empty

HTTP method**GET****Description**

read the specified PrometheusRule

Table 9.10. HTTP responses

HTTP code	Reponse body
200 - OK	PrometheusRule schema
401 - Unauthorized	Empty

HTTP method**PATCH****Description**

partially update the specified PrometheusRule

Table 9.11. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 9.12. HTTP responses

HTTP code	Response body
200 - OK	PrometheusRule schema
401 - Unauthorized	Empty

HTTP method

PUT

Description

replace the specified PrometheusRule

Table 9.13. Query parameters

Parameter	Type	Description

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 9.14. Body parameters

Parameter	Type	Description
body	PrometheusRule schema	

Table 9.15. HTTP responses

HTTP code	Reponse body
200 - OK	PrometheusRule schema
201 - Created	PrometheusRule schema
401 - Unauthorized	Empty

CHAPTER 10. SERVICEMONITOR

[MONITORING.COREOS.COM/V1]

Description

The **ServiceMonitor** custom resource definition (CRD) defines how **Prometheus** and **PrometheusAgent** can scrape metrics from a group of services. Among other things, it allows to specify: * The services to scrape via label selectors. * The container ports to scrape. * Authentication credentials to use. * Target and metric relabeling.

Prometheus and **PrometheusAgent** objects select **ServiceMonitor** objects using label and namespace selectors.

Type

object

Required

- **spec**

10.1. SPECIFICATION

Property	Type	Description
apiVersion	string	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	string	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	ObjectMeta	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Property	Type	Description
spec	object	Specification of desired Service selection for target discovery by Prometheus.
status	object	This Status subresource is under active development and is updated only when the "StatusForConfigurationResources" feature gate is enabled. Most recent observed status of the ServiceMonitor. Read-only. More info: https://github.com/kubernetes/community/blob/master/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

10.1.1. .spec

Description

Specification of desired Service selection for target discovery by Prometheus.

Type

object

Required

- **endpoints**
- **selector**

Property	Type	Description
attachMetadata	object	attachMetadata defines additional metadata which is added to the discovered targets. It requires Prometheus >= v2.37.0.
bodySizeLimit	string	When defined, bodySizeLimit specifies a job level limit on the size of uncompressed response body that will be accepted by Prometheus. It requires Prometheus >= v2.28.0.

Property	Type	Description
convertClassicHistogramsToNHCB	boolean	Whether to convert all scraped classic histograms into a native histogram with custom buckets. It requires Prometheus >= v3.0.0.
endpoints	array	List of endpoints part of this ServiceMonitor. Defines how to scrape metrics from Kubernetes [Endpoints] (https://kubernetes.io/docs/concepts/services-networking/service/#endpoints) objects. In most cases, an Endpoints object is backed by a Kubernetes [Service] (https://kubernetes.io/docs/concepts/services-networking/service/) object with the same name and labels.
endpoints[]	object	Endpoint defines an endpoint serving Prometheus metrics to be scraped by Prometheus.
fallbackScrapeProtocol	string	The protocol to use if a scrape returns blank, unparseable, or otherwise invalid Content-Type. It requires Prometheus >= v3.0.0.
jobLabel	string	jobLabel selects the label from the associated Kubernetes Service object which will be used as the job label for all metrics. For example if jobLabel is set to foo and the Kubernetes Service object is labeled with foo: bar , then Prometheus adds the job="bar" label to all ingested metrics. If the value of this field is empty or if the label doesn't exist for the given Service, the job label of the metrics defaults to the name of the associated Kubernetes Service .

Property	Type	Description
keepDroppedTargets	integer	Per-scrape limit on the number of targets dropped by relabeling that will be kept in memory. 0 means no limit. It requires Prometheus $\geq$ v2.47.0.
labelLimit	integer	Per-scrape limit on number of labels that will be accepted for a sample. It requires Prometheus $\geq$ v2.27.0.
labelNameLengthLimit	integer	Per-scrape limit on length of labels name that will be accepted for a sample. It requires Prometheus $\geq$ v2.27.0.
labelValueLengthLimit	integer	Per-scrape limit on length of labels value that will be accepted for a sample. It requires Prometheus $\geq$ v2.27.0.
namespaceSelector	object	namespaceSelector defines in which namespace(s) Prometheus should discover the services. By default, the services are discovered in the same namespace as the ServiceMonitor object but it is possible to select pods across different/all namespaces.
nativeHistogramBucketLimit	integer	If there are more than this many buckets in a native histogram, buckets will be merged to stay within the limit. It requires Prometheus $\geq$ v2.45.0.
nativeHistogramMinBucketFactor	integer-or-string	If the growth factor of one bucket to the next is smaller than this, buckets will be merged to increase the factor sufficiently. It requires Prometheus $\geq$ v2.50.0.

Property	Type	Description
podTargetLabels	array (string)	podTargetLabels defines the labels which are transferred from the associated Kubernetes Pod object onto the ingested metrics.
sampleLimit	integer	sampleLimit defines a per-scrape limit on the number of scraped samples that will be accepted.
scrapeClass	string	The scrape class to apply.
scrapeClassicHistograms	boolean	Whether to scrape a classic histogram that is also exposed as a native histogram. It requires Prometheus $\geq$ v2.45.0. Notice: scrapeClassicHistograms corresponds to the always_scrape_classic_histograms field in the Prometheus configuration.
scrapeProtocols	array (string)	scrapeProtocols defines the protocols to negotiate during a scrape. It tells clients the protocols supported by Prometheus in order of preference (from most to least preferred). If unset, Prometheus uses its default value. It requires Prometheus $\geq$ v2.49.0.
selector	object	Label selector to select the Kubernetes Endpoints objects to scrape metrics from.

Property	Type	Description
selectorMechanism	string	Mechanism used to select the endpoints to scrape. By default, the selection process relies on relabel configurations to filter the discovered targets. Alternatively, you can opt in for role selectors, which may offer better efficiency in large clusters. Which strategy is best for your use case needs to be carefully evaluated. It requires Prometheus >= v2.17.0.
targetLabels	array (string)	targetLabels defines the labels which are transferred from the associated Kubernetes Service object onto the ingested metrics.
targetLimit	integer	targetLimit defines a limit on the number of scraped targets that will be accepted.

10.1.2. .spec.attachMetadata

Description

attachMetadata defines additional metadata which is added to the discovered targets. It requires Prometheus >= v2.37.0.

Type

object

Property	Type	Description
node	boolean	When set to true, Prometheus attaches node metadata to the discovered targets. The Prometheus service account must have the list and watch permissions on the Nodes objects.

10.1.3. .spec.endpoints

Description

List of endpoints part of this ServiceMonitor. Defines how to scrape metrics from Kubernetes [Endpoints](<https://kubernetes.io/docs/concepts/services-networking/service/#endpoints>) objects. In most cases, an Endpoints object is backed by a Kubernetes [Service]

(<https://kubernetes.io/docs/concepts/services-networking/service/>) object with the same name and labels.

Type

array

10.1.4. .spec.endpoints[]

Description

Endpoint defines an endpoint serving Prometheus metrics to be scraped by Prometheus.

Type

object

Property	Type	Description
authorization	object	authorization configures the Authorization header credentials to use when scraping the target. Cannot be set at the same time as basicAuth, or oauth2.
basicAuth	object	basicAuth configures the Basic Authentication credentials to use when scraping the target. Cannot be set at the same time as authorization, or oauth2.
bearerTokenFile	string	File to read bearer token for scraping the target. Deprecated: use authorization instead.
bearerTokenSecret	object	bearerTokenSecret specifies a key of a Secret containing the bearer token for scraping targets. The secret needs to be in the same namespace as the ServiceMonitor object and readable by the Prometheus Operator. Deprecated: use authorization instead.
enableHttp2	boolean	enableHttp2 can be used to disable HTTP2 when scraping the target.

Property	Type	Description
filterRunning	boolean	When true, the pods which are not running (e.g. either in Failed or Succeeded state) are dropped during the target discovery. If unset, the filtering is enabled. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#pod-phase
followRedirects	boolean	followRedirects defines whether the scrape requests should follow HTTP 3xx redirects.
honorLabels	boolean	When true, honorLabels preserves the metric's labels when they collide with the target's labels.
honorTimestamps	boolean	honorTimestamps controls whether Prometheus preserves the timestamps when exposed by the target.
interval	string	Interval at which Prometheus scrapes the metrics from the target. If empty, Prometheus uses the global scrape interval.
metricRelabelings	array	metricRelabelings configures the relabeling rules to apply to the samples before ingestion.
metricRelabelings[]	object	RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Property	Type	Description
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
oauth2	object	oauth2 configures the OAuth2 settings to use when scraping the target. It requires Prometheus >= 2.27.0. Cannot be set at the same time as authorization, or basicAuth.
params	object	params define optional HTTP URL parameters.
params{}	array (string)	
path	string	HTTP path from which to scrape for metrics. If empty, Prometheus uses the default value (e.g. /metrics).
port	string	Name of the Service port which this endpoint refers to. It takes precedence over targetPort.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	

Property	Type	Description
proxyConnectHeader{}}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
relabelings	array	relabelings configures the relabeling rules to apply the target's metadata labels. The Operator automatically adds relabelings for a few standard Kubernetes fields. The original scrape job's name is available via the __tmp_prometheus_job_name label. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config
relabelings[]	object	RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Property	Type	Description
scheme	string	HTTP scheme to use for scraping. http and https are the expected values unless you rewrite the <i>scheme</i> label via relabeling. If empty, Prometheus uses the default value http.
scrapeTimeout	string	Timeout after which Prometheus considers the scrape to be failed. If empty, Prometheus uses the global scrape timeout unless it is less than the target's scrape interval value in which the latter is used. The value cannot be greater than the scrape interval otherwise the operator will reject the resource.
targetPort	integer-or-string	Name or number of the target port of the Pod object behind the Service. The port must be specified with the container's port property.
tlsConfig	object	TLS configuration to use when scraping the target.
trackTimestampsStaleness	boolean	trackTimestampsStaleness defines whether Prometheus tracks staleness of the metrics that have an explicit timestamp present in scraped data. Has no effect if honorTimestamps is false. It requires Prometheus >= v2.48.0.

10.1.5. .spec.endpoints[].authorization

Description

authorization configures the Authorization header credentials to use when scraping the target. Cannot be set at the same time as **basicAuth**, or **oauth2**.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

10.1.6. .spec.endpoints[].authorization.credentials

Description

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

10.1.7. .spec.endpoints[].basicAuth

Description

basicAuth configures the Basic Authentication credentials to use when scraping the target.

Cannot be set at the same time as **authorization**, or **oauth2**.

Type

object

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

10.1.8. .spec.endpoints[].basicAuth.password**Description**

password specifies a key of a Secret containing the password for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

10.1.9. .spec.endpoints[].basicAuth.username**Description**

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

10.1.10. .spec.endpoints[].bearerTokenSecret

Description

bearerTokenSecret specifies a key of a Secret containing the bearer token for scraping targets. The secret needs to be in the same namespace as the ServiceMonitor object and readable by the Prometheus Operator.

Deprecated: use **authorization** instead.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

10.1.11. .spec.endpoints[].metricRelabelings

Description

metricRelabelings configures the relabeling rules to apply to the samples before ingestion.

Type

array

10.1.12. .spec.endpoints[].metricRelabelings[]

Description

RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples.

More info:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

object

Property	Type	Description
action	string	Action to perform based on the regex matching. Uppercase and Lowercase actions require Prometheus >= v2.36.0. DropEqual and KeepEqual actions require Prometheus >= v2.41.0. Default: "Replace"
modulus	integer	Modulus to take of the hash of the source label values. Only applicable when the action is HashMod .
regex	string	Regular expression against which the extracted value is matched.

Property	Type	Description
replacement	string	Replacement value against which a Replace action is performed if the regular expression matches. Regex capture groups are available.
separator	string	Separator is the string between concatenated SourceLabels.
sourceLabels	array (string)	The source labels select values from existing labels. Their content is concatenated using the configured Separator and matched against the configured regular expression.
targetLabel	string	Label to which the resulting string is written in a replacement. It is mandatory for Replace , HashMod , Lowercase , Uppercase , KeepEqual and DropEqual actions. Regex capture groups are available.

10.1.13. .spec.endpoints[].oauth2

Description

oauth2 configures the OAuth2 settings to use when scraping the target.
It requires Prometheus >= 2.27.0.

Cannot be set at the same time as **authorization**, or **basicAuth**.

Type

object

Required

- **clientId**
- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.

Property	Type	Description
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

10.1.14. .spec.endpoints[].oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

10.1.15. .spec.endpoints[].oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

10.1.16. .spec.endpoints[].oauth2.clientId.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

10.1.17. .spec.endpoints[].oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

10.1.18. .spec.endpoints[].oauth2.proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

10.1.19. .spec.endpoints[].oauth2.proxyConnectHeader{}

Description

Type

array

10.1.20. .spec.endpoints[].oauth2.proxyConnectHeader{}[]

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

10.1.21. .spec.endpoints[].oauth2.tlsConfig

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.

Property	Type	Description
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

10.1.22. .spec.endpoints[].oauth2.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

10.1.23. .spec.endpoints[].oauth2.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

10.1.24. .spec.endpoints[].oauth2.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

10.1.25. .spec.endpoints[].oauth2.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

10.1.26. .spec.endpoints[].oauth2.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

10.1.27. .spec.endpoints[].oauth2.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

10.1.28. .spec.endpoints[].oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

10.1.29. .spec.endpoints[].params

Description

params define optional HTTP URL parameters.

Type

object

10.1.30. .spec.endpoints[].proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

10.1.31. .spec.endpoints[].proxyConnectHeader{}

Description

Type

array

10.1.32. .spec.endpoints[].proxyConnectHeader{}{}

Description

SecretKeySelector selects a key of a Secret.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

10.1.33. .spec.endpoints[].relabelings

Description

relabelings configures the relabeling rules to apply the target's metadata labels. The Operator automatically adds relabelings for a few standard Kubernetes fields.

The original scrape job's name is available via the `\__tmp_prometheus_job_name` label.

More info:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

array

10.1.34. .spec.endpoints[].relabelings[]

Description

RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples.

More info:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

object

Property	Type	Description
action	string	Action to perform based on the regex matching. Uppercase and Lowercase actions require Prometheus <code>>= v2.36.0</code> . DropEqual and KeepEqual actions require Prometheus <code>>= v2.41.0</code> . Default: "Replace"
modulus	integer	Modulus to take of the hash of the source label values. Only applicable when the action is HashMod .

Property	Type	Description
regex	string	Regular expression against which the extracted value is matched.
replacement	string	Replacement value against which a Replace action is performed if the regular expression matches. Regex capture groups are available.
separator	string	Separator is the string between concatenated SourceLabels.
sourceLabels	array (string)	The source labels select values from existing labels. Their content is concatenated using the configured Separator and matched against the configured regular expression.
targetLabel	string	Label to which the resulting string is written in a replacement. It is mandatory for Replace , HashMod , Lowercase , Uppercase , KeepEqual and DropEqual actions. Regex capture groups are available.

10.1.35. .spec.endpoints[].tlsConfig

Description

TLS configuration to use when scraping the target.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
caFile	string	Path to the CA cert in the Prometheus container to use for the targets.

Property	Type	Description
cert	object	Client certificate to present when doing client-authentication.
certFile	string	Path to the client cert file in the Prometheus container for the targets.
insecureSkipVerify	boolean	Disable target certificate validation.
keyFile	string	Path to the client key file in the Prometheus container for the targets.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

10.1.36. .spec.endpoints[].tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

10.1.37. .spec.endpoints[].tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

10.1.38. .spec.endpoints[].tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

10.1.39. .spec.endpoints[].tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

10.1.40. .spec.endpoints[].tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

10.1.41. .spec.endpoints[].tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

10.1.42. .spec.endpoints[].tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

10.1.43. .spec.namespaceSelector

Description

namespaceSelector defines in which namespace(s) Prometheus should discover the services. By default, the services are discovered in the same namespace as the **ServiceMonitor** object but it is possible to select pods across different/all namespaces.

Type

object

Property	Type	Description
any	boolean	Boolean describing whether all namespaces are selected in contrast to a list restricting them.
matchNames	array (string)	List of namespace names to select from.

10.1.44. .spec.selector

Description

Label selector to select the Kubernetes **Endpoints** objects to scrape metrics from.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

10.1.45. .spec.selector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

10.1.46. .spec.selector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.

Property	Type	Description
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

10.1.47. .status

Description

This Status subresource is under active development and is updated only when the "StatusForConfigurationResources" feature gate is enabled.

Most recent observed status of the ServiceMonitor. Read-only. More info:

<https://github.com/kubernetes/community/blob/master/contributors/devel/sig-architecture/api-conventions.md#spec-and-status>

Type

object

Property	Type	Description
bindings	array	The list of workload resources (Prometheus or PrometheusAgent) which select the configuration resource.
bindings[]	object	WorkloadBinding is a link between a configuration resource and a workload resource.

10.1.48. .status.bindings

Description

The list of workload resources (Prometheus or PrometheusAgent) which select the configuration resource.

Type

array

10.1.49. .status.bindings[]

Description

WorkloadBinding is a link between a configuration resource and a workload resource.

Type

object

Required

- **group**
- **name**
- **namespace**
- **resource**

Property	Type	Description
conditions	array	The current state of the configuration resource when bound to the referenced Prometheus object.
conditions[]	object	ConfigResourceCondition describes the status of configuration resources linked to Prometheus, PrometheusAgent, Alertmanager, or ThanosRuler.
group	string	The group of the referenced resource.
name	string	The name of the referenced object.
namespace	string	The namespace of the referenced object.
resource	string	The type of resource being referenced (e.g. Prometheus or PrometheusAgent).

10.1.50. .status.bindings[].conditions**Description**

The current state of the configuration resource when bound to the referenced Prometheus object.

Type

array

10.1.51. .status.bindings[].conditions[]

Description

ConfigResourceCondition describes the status of configuration resources linked to Prometheus, PrometheusAgent, Alertmanager, or ThanosRuler.

Type

object

Required

- **lastTransitionTime**
- **status**
- **type**

Property	Type	Description
lastTransitionTime	string	LastTransitionTime is the time of the last update to the current status property.
message	string	Human-readable message indicating details for the condition's last transition.
observedGeneration	integer	ObservedGeneration represents the <code>.metadata.generation</code> that the condition was set based upon. For instance, if <code>.metadata.generation</code> is currently 12, but the <code>.status.conditions[].observedGeneration</code> is 9, the condition is out of date with respect to the current state of the object.
reason	string	Reason for the condition's last transition.
status	string	Status of the condition.
type	string	Type of the condition being reported. Currently, only "Accepted" is supported.

10.2. API ENDPOINTS

The following API endpoints are available:

- **/apis/monitoring.coreos.com/v1/service_monitors**
 - **GET**: list objects of kind ServiceMonitor

- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/servicemonitors**
 - **DELETE**: delete collection of ServiceMonitor
 - **GET**: list objects of kind ServiceMonitor
 - **POST**: create a ServiceMonitor
- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/servicemonitors/{name}**
 - **DELETE**: delete a ServiceMonitor
 - **GET**: read the specified ServiceMonitor
 - **PATCH**: partially update the specified ServiceMonitor
 - **PUT**: replace the specified ServiceMonitor
- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/servicemonitors/{name}/status**
 - **GET**: read status of the specified ServiceMonitor
 - **PATCH**: partially update status of the specified ServiceMonitor
 - **PUT**: replace status of the specified ServiceMonitor

10.2.1. /apis/monitoring.coreos.com/v1/servicemonitors

HTTP method

GET

Description

list objects of kind ServiceMonitor

Table 10.1. HTTP responses

HTTP code	Reponse body
200 - OK	ServiceMonitorList schema
401 - Unauthorized	Empty

10.2.2. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/servicemonitors

HTTP method

DELETE

Description

delete collection of ServiceMonitor

Table 10.2. HTTP responses

HTTP code	Reponse body
200 - OK	Status schema
401 - Unauthorized	Empty

HTTP method

GET

Description

list objects of kind ServiceMonitor

Table 10.3. HTTP responses

HTTP code	Reponse body
200 - OK	ServiceMonitorList schema
401 - Unauthorized	Empty

HTTP method

POST

Description

create a ServiceMonitor

Table 10.4. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Parameter	Type	Description
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 10.5. Body parameters

Parameter	Type	Description
body	ServiceMonitor schema	

Table 10.6. HTTP responses

HTTP code	Response body
200 - OK	ServiceMonitor schema
201 - Created	ServiceMonitor schema
202 - Accepted	ServiceMonitor schema
401 - Unauthorized	Empty

10.2.3. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/servicemonitors/{

Table 10.7. Global path parameters

Parameter	Type	Description
name	string	name of the ServiceMonitor

HTTP method**DELETE****Description**

delete a ServiceMonitor

Table 10.8. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Table 10.9. HTTP responses

HTTP code	Response body
200 - OK	Status schema
202 - Accepted	Status schema
401 - Unauthorized	Empty

HTTP method**GET****Description**

read the specified ServiceMonitor

Table 10.10. HTTP responses

HTTP code	Response body
200 - OK	ServiceMonitor schema
401 - Unauthorized	Empty

HTTP method**PATCH****Description**

partially update the specified ServiceMonitor

Table 10.11. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 10.12. HTTP responses

HTTP code	Response body
200 - OK	ServiceMonitor schema
401 - Unauthorized	Empty

HTTP method**PUT****Description**

replace the specified ServiceMonitor

Table 10.13. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Parameter	Type	Description
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 10.14. Body parameters

Parameter	Type	Description
body	ServiceMonitor schema	

Table 10.15. HTTP responses

HTTP code	Response body
200 - OK	ServiceMonitor schema
201 - Created	ServiceMonitor schema
401 - Unauthorized	Empty

10.2.4. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/servicemonitors/{

Table 10.16. Global path parameters

Parameter	Type	Description
name	string	name of the ServiceMonitor

HTTP method

GET**Description**

read status of the specified ServiceMonitor

Table 10.17. HTTP responses

HTTP code	Reponse body
200 - OK	ServiceMonitor schema
401 - Unauthorized	Empty

HTTP method**PATCH****Description**

partially update status of the specified ServiceMonitor

Table 10.18. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 10.19. HTTP responses

HTTP code	Response body
200 - OK	ServiceMonitor schema
401 - Unauthorized	Empty

HTTP method**PUT****Description**

replace status of the specified ServiceMonitor

Table 10.20. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 10.21. Body parameters

Parameter	Type	Description
body	ServiceMonitor schema	

Table 10.22. HTTP responses

HTTP code	Reponse body
200 - OK	ServiceMonitor schema
201 - Created	ServiceMonitor schema
401 - Unauthorized	Empty

CHAPTER 11. THANOSRULER

[MONITORING.COREOS.COM/V1]

Description

The **ThanosRuler** custom resource definition (CRD) defines a desired [Thanos Ruler] (<https://github.com/thanos-io/thanos/blob/main/docs/components/rule.md>) setup to run in a Kubernetes cluster.

A **ThanosRuler** instance requires at least one compatible Prometheus API endpoint (either Thanos Querier or Prometheus services).

The resource defines via label and namespace selectors which **PrometheusRule** objects should be associated to the deployed Thanos Ruler instances.

Type

object

Required

- **spec**

11.1. SPECIFICATION

Property	Type	Description
apiVersion	string	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	string	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds

Property	Type	Description
metadata	ObjectMeta	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	object	Specification of the desired behavior of the ThanosRuler cluster. More info: https://github.com/kubernetes/community/blob/master/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	object	Most recent observed status of the ThanosRuler cluster. Read-only. More info: https://github.com/kubernetes/community/blob/master/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

11.1.1. .spec

Description

Specification of the desired behavior of the ThanosRuler cluster. More info:

<https://github.com/kubernetes/community/blob/master/contributors/devel/sig-architecture/api-conventions.md#spec-and-status>

Type

object

Property	Type	Description

Property	Type	Description
additionalArgs	array	AdditionalArgs allows setting additional arguments for the ThanosRuler container. It is intended for e.g. activating hidden flags which are not supported by the dedicated configuration options yet. The arguments are passed as-is to the ThanosRuler container which may cause issues if they are invalid or not supported by the given ThanosRuler version. In case of an argument conflict (e.g. an argument which is already set by the operator itself) or when providing an invalid argument the reconciliation will fail and an error will be logged.
additionalArgs[]	object	Argument as part of the AdditionalArgs list.
affinity	object	If specified, the pod's scheduling constraints.
alertDropLabels	array (string)	Configures the label names which should be dropped in Thanos Ruler alerts. The replica label thanos_ruler_replica will always be dropped from the alerts.
alertQueryUrl	string	The external Query URL the Thanos Ruler will set in the 'Source' field of all alerts. Maps to the '--alert.query-url' CLI arg.

Property	Type	Description
alertRelabelConfigFile	string	Configures the path to the alert relabeling configuration file. Alert relabel configuration must have the form as specified in the official Prometheus documentation: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#alert_relabel_configs The operator performs no validation of the configuration file. This field takes precedence over alertRelabelConfig.
alertRelabelConfigs	object	Configures alert relabeling in Thanos Ruler. Alert relabel configuration must have the form as specified in the official Prometheus documentation: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#alert_relabel_configs The operator performs no validation of the configuration. alertRelabelConfigFile takes precedence over this field.
alertmanagersConfig	object	Configures the list of Alertmanager endpoints to send alerts to. The configuration format is defined at https://thanos.io/tip/components/rule.md/#alertmanager. It requires Thanos >= v0.10.0. The operator performs no validation of the configuration. This field takes precedence over alertmanagersUrl.

Property	Type	Description
alertmanagersUrl	array (string)	Configures the list of Alertmanager endpoints to send alerts to. For Thanos >= v0.10.0, it is recommended to use alertmanagersConfig instead. alertmanagersConfig takes precedence over this field.
containers	array	Containers allows injecting additional containers or modifying operator generated containers. This can be used to allow adding an authentication proxy to a ThanosRuler pod or to change the behavior of an operator generated container. Containers described here modify an operator generated container if they share the same name and modifications are done via a strategic merge patch. The current container names are: thanos-ruler and config-reloader. Overriding containers is entirely outside the scope of what the maintainers will support and by doing so, you accept that this behaviour may break at any time without notice.
containers[]	object	A single application container that you want to run within a pod.
dnsConfig	object	Defines the DNS configuration for the pods.
dnsPolicy	string	Defines the DNS policy for the pods.

Property	Type	Description
enableFeatures	array (string)	Enable access to Thanos Ruler feature flags. By default, no features are enabled. Enabling features which are disabled by default is entirely outside the scope of what the maintainers will support and by doing so, you accept that this behaviour may break at any time without notice. For more information see https://thanos.io/tip/components/rule.md/ It requires Thanos >= 0.39.0.
enableServiceLinks	boolean	Indicates whether information about services should be injected into pod's environment variables
enforcedNamespaceLabel	string	EnforcedNamespaceLabel enforces adding a namespace label of origin for each alert and metric that is user created. The label value will always be the namespace of the object that is being created.
evaluationInterval	string	Interval between consecutive evaluations.
excludedFromEnforcement	array	List of references to PrometheusRule objects to be excluded from enforcing a namespace label of origin. Applies only if enforcedNamespaceLabel set to true.
excludedFromEnforcement[]	object	ObjectReference references a PodMonitor, ServiceMonitor, Probe or PrometheusRule object.
externalPrefix	string	The external URL the Thanos Ruler instances will be available under. This is necessary to generate correct URLs. This is necessary if Thanos Ruler is not served from root of a DNS name.

Property	Type	Description
grpcServerTlsConfig	object	GRPCServerTLSConfig configures the gRPC server from which Thanos Querier reads recorded rule data. Note: Currently only the CAFile, CertFile, and KeyFile fields are supported. Maps to the '--grpc-server-tls-*' CLI args.
hostAliases	array	Pods' hostAliases configuration
hostAliases[]	object	HostAlias holds the mapping between IP and hostnames that will be injected as an entry in the pod's hosts file.
hostUsers	boolean	HostUsers supports the user space in Kubernetes. More info: https://kubernetes.io/docs/tasks/configure-pod-container/user-namespaces/ The feature requires at least Kubernetes 1.28 with the UserNamespacesSupport feature gate enabled. Starting Kubernetes 1.33, the feature is enabled by default.
image	string	Thanos container image URL.
imagePullPolicy	string	Image pull policy for the 'thanos', 'init-config-reloader' and 'config-reloader' containers. See https://kubernetes.io/docs/concepts/containers/images/#image-pull-policy for more details.
imagePullSecrets	array	An optional list of references to secrets in the same namespace to use for pulling thanos images from registries see http://kubernetes.io/docs/user-guide/images#specifying-imagepullsecrets-on-a-pod

Property	Type	Description
imagePullSecrets[]	object	LocalObjectReference contains enough information to let you locate the referenced object inside the same namespace.
initContainers	array	InitContainers allows adding initContainers to the pod definition. Those can be used to e.g. fetch secrets for injection into the ThanosRuler configuration from external sources. Any errors during the execution of an initContainer will lead to a restart of the Pod. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/ Using initContainers for any use case other than secret fetching is entirely outside the scope of what the maintainers will support and by doing so, you accept that this behaviour may break at any time without notice.
initContainers[]	object	A single application container that you want to run within a pod.
labels	object (string)	Configures the external label pairs of the ThanosRuler resource. A default replica label thanos_ruler_replica will be always added as a label with the value of the pod's name.
listenLocal	boolean	ListenLocal makes the Thanos ruler listen on loopback, so that it does not bind against the Pod IP.
logFormat	string	Log format for ThanosRuler to be configured with.
logLevel	string	Log level for ThanosRuler to be configured with.

Property	Type	Description
minReadySeconds	integer	Minimum number of seconds for which a newly created pod should be ready without any of its container crashing for it to be considered available. If unset, pods will be considered available as soon as they are ready.
nodeSelector	object (string)	Define which Nodes the Pods are scheduled on.
objectStorageConfig	object	Configures object storage. The configuration format is defined at https://thanos.io/tip/thanos/storage.md/#configuring-access-to-object-storage The operator performs no validation of the configuration. objectStorageConfigFile takes precedence over this field.
objectStorageConfigFile	string	Configures the path of the object storage configuration file. The configuration format is defined at https://thanos.io/tip/thanos/storage.md/#configuring-access-to-object-storage The operator performs no validation of the configuration file. This field takes precedence over objectStorageConfig.
paused	boolean	When a ThanosRuler deployment is paused, no actions except for deletion will be performed on the underlying objects.

Property	Type	Description
podMetadata	object	PodMetadata configures labels and annotations which are propagated to the ThanosRuler pods. The following items are reserved and cannot be overridden: * "app.kubernetes.io/name" label, set to "thanos-ruler". * "app.kubernetes.io/managed-by" label, set to "prometheus-operator". * "app.kubernetes.io/instance" label, set to the name of the ThanosRuler instance. * "thanos-ruler" label, set to the name of the ThanosRuler instance. * "kubectl.kubernetes.io/default-container" annotation, set to "thanos-ruler".
portName	string	Port name used for the pods and governing service. Defaults to web .
priorityClassName	string	Priority class assigned to the Pods
prometheusRulesExcludedFromEnforce	array	PrometheusRulesExcludedFromEnforce - list of Prometheus rules to be excluded from enforcing of adding namespace labels. Works only if enforcedNamespaceLabel set to true. Make sure both ruleNamespace and ruleName are set for each pair Deprecated: use excludedFromEnforcement instead.
prometheusRulesExcludedFromEnforce[]	object	PrometheusRuleExcludeConfig enables users to configure excluded PrometheusRule names and their namespaces to be ignored while enforcing namespace label for alerts and metrics.

Property	Type	Description
queryConfig	object	Configures the list of Thanos Query endpoints from which to query metrics. The configuration format is defined at https://thanos.io/tip/components/rule.md/#query-api It requires Thanos >= v0.11.0. The operator performs no validation of the configuration. This field takes precedence over queryEndpoints.
queryEndpoints	array (string)	Configures the list of Thanos Query endpoints from which to query metrics. For Thanos >= v0.11.0, it is recommended to use queryConfig instead. queryConfig takes precedence over this field.
remoteWrite	array	Defines the list of remote write configurations. When the list isn't empty, the ruler is configured with stateless mode. It requires Thanos >= 0.24.0.
remoteWrite[]	object	RemoteWriteSpec defines the configuration to write samples from Prometheus to a remote endpoint.
replicas	integer	Number of thanos ruler instances to deploy.
resendDelay	string	Minimum amount of time to wait before resending an alert to Alertmanager.

Property	Type	Description
resources	object	Resources defines the resource requirements for single Pods. If not provided, no requests/limits will be set
retention	string	Time duration ThanosRuler shall retain data for. Default is '24h', and must match the regular expression [0-9]+(ms s m h d w y) (milliseconds seconds minutes hours days weeks years). The field has no effect when remote-write is configured since the Ruler operates in stateless mode.
routePrefix	string	The route prefix ThanosRuler registers HTTP handlers for. This allows thanos UI to be served on a sub-path.
ruleConcurrentEval	integer	How many rules can be evaluated concurrently. It requires Thanos >= v0.37.0.
ruleGracePeriod	string	Minimum duration between alert and restored "for" state. This is maintained only for alerts with configured "for" time greater than grace period. It requires Thanos >= v0.30.0.
ruleNamespaceSelector	object	Namespaces to be selected for Rules discovery. If unspecified, only the same namespace as the ThanosRuler object is in is used.
ruleOutageTolerance	string	Max time to tolerate prometheus outage for restoring "for" state of alert. It requires Thanos >= v0.30.0.
ruleQueryOffset	string	The default rule group's query offset duration to use. It requires Thanos >= v0.38.0.

Property	Type	Description
ruleSelector	object	PrometheusRule objects to be selected for rule evaluation. An empty label selector matches all objects. A null label selector matches no objects.
securityContext	object	SecurityContext holds pod-level security attributes and common container settings. This defaults to the default PodSecurityContext.
serviceAccountName	string	ServiceAccountName is the name of the ServiceAccount to use to run the Thanos Ruler Pods.
serviceName	string	The name of the service name used by the underlying StatefulSet(s) as the governing service. If defined, the Service must be created before the ThanosRuler resource in the same namespace and it must define a selector that matches the pod labels. If empty, the operator will create and manage a headless service named thanos-ruler-operated for ThanosRuler resources. When deploying multiple ThanosRuler resources in the same namespace, it is recommended to specify a different value for each. See https://kubernetes.io/docs/concepts/workloads/controllers/statefulset/#stable-network-id for more details.
storage	object	Storage spec to specify how storage shall be used.
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down) which may lead to data corruption. Defaults to 120 seconds.

Property	Type	Description
tolerations	array	If specified, the pod's tolerations.
tolerations[]	object	The pod this Tolerant is attached to tolerates any taint that matches the triple <key,value,effect> using the matching operator <operator>.
topologySpreadConstraints	array	If specified, the pod's topology spread constraints.
topologySpreadConstraints[]	object	TopologySpreadConstraint specifies how to spread matching pods among the given topology.
tracingConfig	object	Configures tracing. The configuration format is defined at https://thanos.io/tip/thanos/tracing.md/#configuration This is an experimental feature, it may change in any upcoming release in a breaking way. The operator performs no validation of the configuration. tracingConfigFile takes precedence over this field.
tracingConfigFile	string	Configures the path of the tracing configuration file. The configuration format is defined at https://thanos.io/tip/thanos/tracing.md/#configuration This is an experimental feature, it may change in any upcoming release in a breaking way. The operator performs no validation of the configuration file. This field takes precedence over tracingConfig.

Property	Type	Description
version	string	Version of Thanos to be deployed.
volumeMounts	array	VolumeMounts allows configuration of additional VolumeMounts on the output StatefulSet definition. VolumeMounts specified will be appended to other VolumeMounts in the ruler container, that are generated as a result of StorageSpec objects.
volumeMounts[]	object	VolumeMount describes a mounting of a Volume within a container.
volumes	array	Volumes allows configuration of additional volumes on the output StatefulSet definition. Volumes specified will be appended to other volumes that are generated as a result of StorageSpec objects.
volumes[]	object	Volume represents a named volume in a pod that may be accessed by any container in the pod.
web	object	Defines the configuration of the ThanosRuler web server.

11.1.2. .spec.additionalArgs

Description

AdditionalArgs allows setting additional arguments for the ThanosRuler container. It is intended for e.g. activating hidden flags which are not supported by the dedicated configuration options yet. The arguments are passed as-is to the ThanosRuler container which may cause issues if they are invalid or not supported by the given ThanosRuler version. In case of an argument conflict (e.g. an argument which is already set by the operator itself) or when providing an invalid argument the reconciliation will fail and an error will be logged.

Type

array

11.1.3. .spec.additionalArgs[]

Description

Argument as part of the AdditionalArgs list.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name of the argument, e.g. "scrape.discovery-reload-interval".
value	string	Argument value, e.g. 30s. Can be empty for name-only arguments (e.g. --storage.tsdb.no-lockfile)

11.1.4. .spec.affinity

Description

If specified, the pod's scheduling constraints.

Type

object

Property	Type	Description
nodeAffinity	object	Describes node affinity scheduling rules for the pod.
podAffinity	object	Describes pod affinity scheduling rules (e.g. co-locate this pod in the same node, zone, etc. as some other pod(s)).
podAntiAffinity	object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same node, zone, etc. as some other pod(s)).

11.1.5. .spec.affinity.nodeAffinity

Description

Describes node affinity scheduling rules for the pod.

Type

object

Property	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	array	The scheduler will prefer to schedule pods to nodes that satisfy the affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node matches the corresponding matchExpressions; the node(s) with the highest sum are the most preferred.
preferredDuringSchedulingIgnoredDuringExecution[]	object	An empty preferred scheduling term matches all objects with implicit weight 0 (i.e. it's a no-op). A null preferred scheduling term matches no objects (i.e. is also a no-op).
requiredDuringSchedulingIgnoredDuringExecution	object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

11.1.6. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

The scheduler will prefer to schedule pods to nodes that satisfy the affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node matches the corresponding matchExpressions; the node(s) with the highest sum are the most preferred.

Type

array**11.1.7. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[]****Description**

An empty preferred scheduling term matches all objects with implicit weight 0 (i.e. it's a no-op). A null preferred scheduling term matches no objects (i.e. is also a no-op).

Type**object****Required**

- **preference**
- **weight**

Property	Type	Description
preference	object	A node selector term, associated with the corresponding weight.
weight	integer	Weight associated with matching the corresponding nodeSelectorTerm, in the range 1-100.

11.1.8. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[]**Description**

A node selector term, associated with the corresponding weight.

Type**object**

Property	Type	Description
matchExpressions	array	A list of node selector requirements by node's labels.
matchExpressions[]	object	A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchFields	array	A list of node selector requirements by node's fields.

Property	Type	Description
matchFields[]	object	A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

11.1.9. `.spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[]`

Description

A list of node selector requirements by node's labels.

Type

array

11.1.10. `.spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[]`

Description

A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	The label key that the selector applies to.
operator	string	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt.

Property	Type	Description
values	array (string)	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

11.1.11. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[

Description

A list of node selector requirements by node's fields.

Type

array

11.1.12. .spec.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[

Description

A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	The label key that the selector applies to.
operator	string	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist, Gt, and Lt.

Property	Type	Description
values	array (string)	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

11.1.13. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Type

object

Required

- **nodeSelectorTerms**

Property	Type	Description
nodeSelectorTerms	array	Required. A list of node selector terms. The terms are ORed.
nodeSelectorTerms[]	object	A null or empty node selector term matches no objects. The requirements of them are ANDed. The TopologySelectorTerm type implements a subset of the NodeSelectorTerm.

11.1.14. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.n

Description

Required. A list of node selector terms. The terms are ORed.

Type

array

11.1.15. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.n

Description

A null or empty node selector term matches no objects. The requirements of them are ANDed. The TopologySelectorTerm type implements a subset of the NodeSelectorTerm.

Type

object

Property	Type	Description
matchExpressions	array	A list of node selector requirements by node's labels.
matchExpressions[]	object	A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchFields	array	A list of node selector requirements by node's fields.
matchFields[]	object	A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

11.1.16. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.n**Description**

A list of node selector requirements by node's labels.

Type

array

11.1.17. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.n**Description**

A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	The label key that the selector applies to.
operator	string	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist, Gt, and Lt.
values	array (string)	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

11.1.18. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.n

Description

A list of node selector requirements by node's fields.

Type

array

11.1.19. .spec.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.n

Description

A node selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	The label key that the selector applies to.

Property	Type	Description
operator	string	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist, Gt, and Lt.
values	array (string)	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

11.1.20. .spec.affinity.podAffinity

Description

Describes pod affinity scheduling rules (e.g. co-locate this pod in the same node, zone, etc. as some other pod(s)).

Type

object

Property	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	array	The scheduler will prefer to schedule pods to nodes that satisfy the affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.

Property	Type	Description
preferredDuringSchedulingIgnoredDuringExecution[]	object	The weights of all of the matched WeightedPodAffinityTerm fields are added per-node to find the most preferred node(s)
requiredDuringSchedulingIgnoredDuringExecution	array	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.
requiredDuringSchedulingIgnoredDuringExecution[]	object	Defines a set of pods (namely those matching the labelSelector relative to the given namespace(s)) that this pod should be co-located (affinity) or not co-located (anti-affinity) with, where co-located is defined as running on a node whose value of the label with key <topologyKey> matches that of any node on which a pod of the set of pods is running

11.1.21. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

The scheduler will prefer to schedule pods to nodes that satisfy the affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.

Type

array

11.1.22. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

The weights of all of the matched WeightedPodAffinityTerm fields are added per-node to find the most preferred node(s)

Type

object

Required

- **podAffinityTerm**
- **weight**

Property	Type	Description
podAffinityTerm	object	Required. A pod affinity term, associated with the corresponding weight.
weight	integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

11.1.23. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[

Description

Required. A pod affinity term, associated with the corresponding weight.

Type

object

Required

- **topologyKey**

Property	Type	Description
labelSelector	object	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.

Property	Type	Description
matchLabelKeys	array (string)	MatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key in (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both matchLabelKeys and labelSelector. Also, matchLabelKeys cannot be set when labelSelector isn't set.
mismatchLabelKeys	array (string)	MismatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key notin (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both mismatchLabelKeys and labelSelector. Also, mismatchLabelKeys cannot be set when labelSelector isn't set.

Property	Type	Description
namespaceSelector	object	A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.
namespaces	array (string)	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	string	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

11.1.24. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[

Description

A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.

Property	Type	Description
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

11.1.25. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

11.1.26. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

11.1.27. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

11.1.28. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array**11.1.29. .spec.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[]****Description**

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type**object****Required**

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

11.1.30. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution**Description**

If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Type**array****11.1.31. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[]****Description**

Defines a set of pods (namely those matching the labelSelector relative to the given namespace(s))

that this pod should be co-located (affinity) or not co-located (anti-affinity) with, where co-located is defined as running on a node whose value of the label with key <topologyKey> matches that of any node on which a pod of the set of pods is running

Type

object

Required

- **topologyKey**

Property	Type	Description
labelSelector	object	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.
matchLabelKeys	array (string)	MatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key in (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both matchLabelKeys and labelSelector. Also, matchLabelKeys cannot be set when labelSelector isn't set.

Property	Type	Description
mismatchLabelKeys	array (string)	MismatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key notin (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both mismatchLabelKeys and labelSelector. Also, mismatchLabelKeys cannot be set when labelSelector isn't set.
namespaceSelector	object	A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.
namespaces	array (string)	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".

Property	Type	Description
topologyKey	string	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

11.1.32. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[.].

Description

A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

11.1.33. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[.].

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

11.1.34. `.spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[]`.

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

11.1.35. `.spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[]`.

Description

A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.

Property	Type	Description
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

11.1.36. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

11.1.37. .spec.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

11.1.38. .spec.affinity.podAntiAffinity

Description

Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same node, zone, etc. as some other pod(s)).

Type

object

Property	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	array	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
preferredDuringSchedulingIgnoredDuringExecution[]	object	The weights of all of the matched WeightedPodAffinityTerm fields are added per-node to find the most preferred node(s)

Property	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	array	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.
requiredDuringSchedulingIgnoredDuringExecution[]	object	Defines a set of pods (namely those matching the labelSelector relative to the given namespace(s)) that this pod should be co-located (affinity) or not co-located (anti-affinity) with, where co-located is defined as running on a node whose value of the label with key <topologyKey> matches that of any node on which a pod of the set of pods is running

11.1.39. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.

Type

array

11.1.40. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution

Description

The weights of all of the matched WeightedPodAffinityTerm fields are added per-node to find the most preferred node(s)

Type

object

Required

- **podAffinityTerm**
- **weight**

Property	Type	Description
podAffinityTerm	object	Required. A pod affinity term, associated with the corresponding weight.
weight	integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

11.1.41. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecuti

Description

Required. A pod affinity term, associated with the corresponding weight.

Type

object

Required

- **topologyKey**

Property	Type	Description
labelSelector	object	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.

Property	Type	Description
matchLabelKeys	array (string)	MatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key in (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both matchLabelKeys and labelSelector. Also, matchLabelKeys cannot be set when labelSelector isn't set.
mismatchLabelKeys	array (string)	MismatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key notin (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both mismatchLabelKeys and labelSelector. Also, mismatchLabelKeys cannot be set when labelSelector isn't set.

Property	Type	Description
namespaceSelector	object	A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.
namespaces	array (string)	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	string	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

11.1.42. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecut

Description

A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.

Property	Type	Description
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

11.1.43. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecut

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

11.1.44. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecut

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

11.1.45. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecut

Description

A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

11.1.46. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecut

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

11.1.47. .spec.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution**Description**

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

11.1.48. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution**Description**

If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Type

array

11.1.49. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution**Description**

Defines a set of pods (namely those matching the labelSelector relative to the given namespace(s)) that this pod should be co-located (affinity) or not co-located (anti-affinity) with, where co-located is defined as running on a node whose value of the label with key <topologyKey> matches that of any

node on which a pod of the set of pods is running

Type

object

Required

- **topologyKey**

Property	Type	Description
labelSelector	object	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.
matchLabelKeys	array (string)	MatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key in (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both matchLabelKeys and labelSelector. Also, matchLabelKeys cannot be set when labelSelector isn't set.

Property	Type	Description
mismatchLabelKeys	array (string)	MismatchLabelKeys is a set of pod label keys to select which pods will be taken into consideration. The keys are used to lookup values from the incoming pod labels, those key-value labels are merged with labelSelector as key notin (value) to select the group of existing pods which pods will be taken into consideration for the incoming pod's pod (anti) affinity. Keys that don't exist in the incoming pod labels will be ignored. The default value is empty. The same key is forbidden to exist in both mismatchLabelKeys and labelSelector. Also, mismatchLabelKeys cannot be set when labelSelector isn't set.
namespaceSelector	object	A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.
namespaces	array (string)	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".

Property	Type	Description
topologyKey	string	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

11.1.50. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

11.1.51. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

11.1.52. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

11.1.53. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

A label query over the set of namespaces that the term applies to. The term is applied to the union of the namespaces selected by this field and the ones listed in the namespaces field. null selector and null or empty namespaces list means "this pod's namespace". An empty selector ({}) matches all namespaces.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.

Property	Type	Description
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

11.1.54. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

11.1.55. .spec.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

11.1.56. .spec.alertRelabelConfigs

Description

Configures alert relabeling in Thanos Ruler.

Alert relabel configuration must have the form as specified in the official Prometheus documentation:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#alert_relabel_configs

The operator performs no validation of the configuration.

alertRelabelConfigFile takes precedence over this field.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.57. .spec.alertmanagersConfig

Description

Configures the list of Alertmanager endpoints to send alerts to.

The configuration format is defined at <https://thanos.io/tip/components/rule.md/#alertmanager>.

It requires Thanos >= v0.10.0.

The operator performs no validation of the configuration.

This field takes precedence over **alertmanagersUrl**.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.58. .spec.containers

Description

Containers allows injecting additional containers or modifying operator generated containers. This can be used to allow adding an authentication proxy to a ThanosRuler pod or to change the behavior of an operator generated container. Containers described here modify an operator generated container if they share the same name and modifications are done via a strategic merge patch. The current container names are: **thanos-ruler** and **config-reloader**. Overriding containers is entirely outside the scope of what the maintainers will support and by doing so, you accept that this behaviour may break at any time without notice.

Type

array

11.1.59. .spec.containers[]

Description

A single application container that you want to run within a pod.

Type

object

Required

- **name**

Property	Type	Description
args	array (string)	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$(VAR_NAME)" will produce the string literal "\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Property	Type	Description
command	array (string)	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$(VAR_NAME)" will produce the string literal "\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	array	List of environment variables to set in the container. Cannot be updated.
env[]	object	EnvVar represents an environment variable present in a Container.
envFrom	array	List of sources to populate environment variables in the container. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.
envFrom[]	object	EnvFromSource represents the source of a set of ConfigMaps or Secrets

Property	Type	Description
image	string	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
imagePullPolicy	string	Image pull policy. One of Always, Never, IfNotPresent. Defaults to Always if :latest tag is specified, or IfNotPresent otherwise. Cannot be updated. More info: https://kubernetes.io/docs/concepts/containers/images#updating-images
lifecycle	object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	string	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.

Property	Type	Description
ports	array	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
ports[]	object	ContainerPort represents a network port in a single container.
readinessProbe	object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
resizePolicy	array	Resources resize policy for the container.
resizePolicy[]	object	ContainerResizePolicy represents resource resize policy for the container.
resources	object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manager-resources-containers/

Property	Type	Description
restartPolicy	string	RestartPolicy defines the restart behavior of individual containers in a pod. This field may only be set for init containers, and the only allowed value is "Always". For non-init containers or when this field is not specified, the restart behavior is defined by the Pod's restart policy and the container type. Setting the RestartPolicy as "Always" for the init container will have the following effect: this init container will be continually restarted on exit until all regular containers have terminated. Once all regular containers have completed, all init containers with restartPolicy "Always" will be shut down. This lifecycle differs from normal init containers and is often referred to as a "sidecar" container. Although this init container still starts in the init container sequence, it does not wait for the container to complete before proceeding to the next init container. Instead, the next init container starts immediately after this init container is started, or after any startupProbe has successfully completed.
securityContext	object	SecurityContext defines the security options the container should be run with. If set, the fields of SecurityContext override the equivalent fields of PodSecurityContext. More info: https://kubernetes.io/docs/tasks/configure-pod-container/security-context/

Property	Type	Description
startupProbe	object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
stdinOnce	boolean	Whether the container runtime should close the stdin channel after it has been opened by a single attach. When stdin is true the stdin stream will remain open across multiple attach sessions. If stdinOnce is set to true, stdin is opened on container start, is empty until the first client attaches to stdin, and then remains open and accepts data until the client disconnects, at which time stdin is closed and remains closed until the container is restarted. If this flag is false, a container processes that reads from stdin will never receive an EOF. Default is false

Property	Type	Description
terminationMessagePath	string	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.
terminationMessagePolicy	string	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated.
tty	boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeDevices	array	volumeDevices is the list of block devices to be used by the container.
volumeDevices[]	object	volumeDevice describes a mapping of a raw block device within a container.
volumeMounts	array	Pod volumes to mount into the container's filesystem. Cannot be updated.

Property	Type	Description
volumeMounts[]	object	VolumeMount describes a mounting of a Volume within a container.
workingDir	string	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated.

11.1.60. .spec.containers[].env

Description

List of environment variables to set in the container. Cannot be updated.

Type

array

11.1.61. .spec.containers[].env[]

Description

EnvVar represents an environment variable present in a Container.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name of the environment variable. Must be a C_IDENTIFIER.

Property	Type	Description
value	string	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	object	Source for the environment variable's value. Cannot be used if value is not empty.

11.1.62. .spec.containers[].env[].valueFrom

Description

Source for the environment variable's value. Cannot be used if value is not empty.

Type

object

Property	Type	Description
configMapKeyRef	object	Selects a key of a ConfigMap.
fieldRef	object	Selects a field of the pod: supports metadata.name, metadata.namespace, metadata.labels['<KEY>'] , metadata.annotations['<KEY>'] , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.

Property	Type	Description
resourceFieldRef	object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, limits.ephemeral-storage, requests.cpu, requests.memory and requests.ephemeral-storage) are currently supported.
secretKeyRef	object	Selects a key of a secret in the pod's namespace

11.1.63. .spec.containers[].env[].valueFrom.configMapKeyRef

Description

Selects a key of a ConfigMap.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

11.1.64. .spec.containers[].env[].valueFrom.fieldRef

Description

Selects a field of the pod: supports metadata.name, metadata.namespace, **metadata.labels['<KEY>']**, **metadata.annotations['<KEY>']**, spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.

Type**object****Required**

- **fieldPath**

Property	Type	Description
apiVersion	string	Version of the schema the FieldPath is written in terms of, defaults to "v1".
fieldPath	string	Path of the field to select in the specified API version.

11.1.65. .spec.containers[].env[].valueFrom.resourceFieldRef

Description

Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, limits.ephemeral-storage, requests.cpu, requests.memory and requests.ephemeral-storage) are currently supported.

Type**object****Required**

- **resource**

Property	Type	Description
containerName	string	Container name: required for volumes, optional for env vars
divisor	integer-or-string	Specifies the output format of the exposed resources, defaults to "1"
resource	string	Required: resource to select

11.1.66. .spec.containers[].env[].valueFrom.secretKeyRef

Description

Selects a key of a secret in the pod's namespace

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.67. .spec.containers[].envFrom

Description

List of sources to populate environment variables in the container. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Type

array

11.1.68. .spec.containers[].envFrom[]

Description

EnvFromSource represents the source of a set of ConfigMaps or Secrets

Type

object

Property	Type	Description
configMapRef	object	The ConfigMap to select from
prefix	string	Optional text to prepend to the name of each environment variable. Must be a C_IDENTIFIER.
secretRef	object	The Secret to select from

11.1.69. .spec.containers[].envFrom[].configMapRef

Description

The ConfigMap to select from

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap must be defined

11.1.70. .spec.containers[].envFrom[].secretRef

Description

The Secret to select from

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret must be defined

11.1.71. .spec.containers[].lifecycle

Description

Actions that the management system should take in response to container lifecycle events. Cannot be updated.

Type
object

Property	Type	Description
postStart	object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
stopSignal	string	StopSignal defines which signal will be sent to a container when it is being stopped. If not specified, the default is defined by the container runtime in use. StopSignal can only be set for Pods with a non-empty .spec.os.name

11.1.72. .spec.containers[].lifecycle.postStart

Description

PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: <https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
sleep	object	Sleep represents a duration that the container should sleep.
tcpSocket	object	Deprecated. TCPSocket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

11.1.73. .spec.containers[].lifecycle.postStart.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

11.1.74. .spec.containers[].lifecycle.postStart.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.

Property	Type	Description
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

11.1.75. .spec.containers[].lifecycle.postStart.httpGet.httpHeaders

Description

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

11.1.76. .spec.containers[].lifecycle.postStart.httpGet.httpHeaders[]

Description

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

11.1.77. .spec.containers[].lifecycle.postStart.sleep

Description

Sleep represents a duration that the container should sleep.

Type

object

Required

- **seconds**

Property	Type	Description
seconds	integer	Seconds is the number of seconds to sleep.

11.1.78. .spec.containers[].lifecycle.postStart.tcpSocket**Description**

Deprecated. TCP Socket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

11.1.79. .spec.containers[].lifecycle.preStop**Description**

PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: <https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
sleep	object	Sleep represents a duration that the container should sleep.
tcpSocket	object	Deprecated. TCPSocket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

11.1.80. .spec.containers[].lifecycle.preStop.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

11.1.81. .spec.containers[].lifecycle.preStop.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

11.1.82. .spec.containers[].lifecycle.preStop.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

11.1.83. .spec.containers[].lifecycle.preStop.httpGet.httpHeaders[]**Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

11.1.84. .spec.containers[].lifecycle.preStop.sleep

Description

Sleep represents a duration that the container should sleep.

Type

object

Required

- **seconds**

Property	Type	Description
seconds	integer	Seconds is the number of seconds to sleep.

11.1.85. .spec.containers[].lifecycle.preStop.tcpSocket

Description

Deprecated. TCP Socket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.

Property	Type	Description
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

11.1.86. .spec.containers[].livenessProbe

Description

Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: <https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
failureThreshold	integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
grpc	object	GRPC specifies a GRPC HealthCheckRequest.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
initialDelaySeconds	integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.

Property	Type	Description
successThreshold	integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	object	TCPSocket specifies a connection to a TCP port.
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully upon probe failure. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. If this value is nil, the pod's terminationGracePeriodSeconds will be used. Otherwise, this value overrides the value provided by the pod spec. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). This is a beta field and requires enabling ProbeTerminationGracePeriod feature gate. Minimum value is 1. spec.terminationGracePeriodSeconds is used if unset.
timeoutSeconds	integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

11.1.87. .spec.containers[].livenessProbe.exec

Description

Exec specifies a command to execute in the container.

Type
object

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

11.1.88. .spec.containers[].livenessProbe.grpc

Description

GRPC specifies a GRPC HealthCheckRequest.

Type
object

Required

- **port**

Property	Type	Description
port	integer	Port number of the gRPC service. Number must be in the range 1 to 65535.
service	string	Service is the name of the service to place in the gRPC HealthCheckRequest (see https://github.com/grpc/grpc/blob/master/doc/health-checking.md). If this is not specified, the default behavior is defined by gRPC.

11.1.89. .spec.containers[].livenessProbe.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

11.1.90. .spec.containers[].livenessProbe.httpGet.httpHeaders

Description

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

11.1.91. .spec.containers[].livenessProbe.httpGet.httpHeaders[]

Description

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**

- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

11.1.92. .spec.containers[].livenessProbe.tcpSocket

Description

TCPSocket specifies a connection to a TCP port.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

11.1.93. .spec.containers[].ports

Description

List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See <https://github.com/kubernetes/kubernetes/issues/108255>. Cannot be updated.

Type

array

11.1.94. .spec.containers[].ports[]

Description

ContainerPort represents a network port in a single container.

Type

object

Required

- **containerPort**

Property	Type	Description
containerPort	integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
hostIP	string	What host IP to bind the external port to.
hostPort	integer	Number of port to expose on the host. If specified, this must be a valid port number, $0 < x < 65536$. If HostNetwork is specified, this must match ContainerPort. Most containers do not need this.
name	string	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services.
protocol	string	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP".

11.1.95. .spec.containers[].readinessProbe

Description

Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info:

<https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.

Property	Type	Description
failureThreshold	integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
grpc	object	GRPC specifies a GRPC HealthCheckRequest.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
initialDelaySeconds	integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	object	TCPSocket specifies a connection to a TCP port.

Property	Type	Description
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully upon probe failure. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. If this value is nil, the pod's terminationGracePeriodSeconds will be used. Otherwise, this value overrides the value provided by the pod spec. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). This is a beta field and requires enabling ProbeTerminationGracePeriod feature gate. Minimum value is 1. spec.terminationGracePeriodSeconds is used if unset.
timeoutSeconds	integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

11.1.96. .spec.containers[].readinessProbe.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

11.1.97. .spec.containers[].readinessProbe.grpc

Description

GRPC specifies a GRPC HealthCheckRequest.

Type

object

Required

- **port**

Property	Type	Description
port	integer	Port number of the gRPC service. Number must be in the range 1 to 65535.
service	string	Service is the name of the service to place in the gRPC HealthCheckRequest (see https://github.com/grpc/grpc/blob/master/doc/health-checking.md). If this is not specified, the default behavior is defined by gRPC.

11.1.98. .spec.containers[].readinessProbe.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

11.1.99. .spec.containers[].readinessProbe.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

11.1.100. .spec.containers[].readinessProbe.httpGet.httpHeaders[]**Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

11.1.101. .spec.containers[].readinessProbe.tcpSocket

Description

TCP socket specifies a connection to a TCP port.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

11.1.102. .spec.containers[].resizePolicy

Description

Resources resize policy for the container.

Type

array

11.1.103. .spec.containers[].resizePolicy[]

Description

ContainerResizePolicy represents resource resize policy for the container.

Type

object

Required

- **resourceName**

- **restartPolicy**

Property	Type	Description
resourceName	string	Name of the resource to which this resource resize policy applies. Supported values: cpu, memory.
restartPolicy	string	Restart policy to apply when specified resource is resized. If not specified, it defaults to NotRequired.

11.1.104. .spec.containers[].resources

Description

Compute Resources required by this container. Cannot be updated. More info:

<https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/>

Type

object

Property	Type	Description
claims	array	Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate. This field is immutable. It can only be set for containers.
claims[]	object	ResourceClaim references one entry in PodSpec.ResourceClaims.
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Property	Type	Description
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

11.1.105. .spec.containers[].resources.claims

Description

Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate.

This field is immutable. It can only be set for containers.

Type

array

11.1.106. .spec.containers[].resources.claims[]

Description

ResourceClaim references one entry in PodSpec.ResourceClaims.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name must match the name of one entry in pod.spec.resourceClaims of the Pod where this field is used. It makes that resource available inside a container.

Property	Type	Description
request	string	Request is the name chosen for a request in the referenced claim. If empty, everything from the claim is made available, otherwise only the result of this request.

11.1.107. .spec.containers[].securityContext

Description

SecurityContext defines the security options the container should be run with. If set, the fields of SecurityContext override the equivalent fields of PodSecurityContext. More info:

<https://kubernetes.io/docs/tasks/configure-pod-container/security-context/>

Type

object

Property	Type	Description
allowPrivilegeEscalation	boolean	AllowPrivilegeEscalation controls whether a process can gain more privileges than its parent process. This bool directly controls if the no_new_privs flag will be set on the container process. AllowPrivilegeEscalation is true always when the container is: 1) run as Privileged 2) has CAP_SYS_ADMIN Note that this field cannot be set when spec.os.name is windows.
appArmorProfile	object	appArmorProfile is the AppArmor options to use by this container. If set, this profile overrides the pod's appArmorProfile. Note that this field cannot be set when spec.os.name is windows.
capabilities	object	The capabilities to add/drop when running containers. Defaults to the default set of capabilities granted by the container runtime. Note that this field cannot be set when spec.os.name is windows.

Property	Type	Description
privileged	boolean	Run container in privileged mode. Processes in privileged containers are essentially equivalent to root on the host. Defaults to false. Note that this field cannot be set when spec.os.name is windows.
procMount	string	procMount denotes the type of proc mount to use for the containers. The default value is Default which uses the container runtime defaults for readonly paths and masked paths. This requires the ProcMountType feature flag to be enabled. Note that this field cannot be set when spec.os.name is windows.
readOnlyRootFilesystem	boolean	Whether this container has a read-only root filesystem. Default is false. Note that this field cannot be set when spec.os.name is windows.
runAsGroup	integer	The GID to run the entrypoint of the container process. Uses runtime default if unset. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.
runAsNonRoot	boolean	Indicates that the container must run as a non-root user. If true, the Kubelet will validate the image at runtime to ensure that it does not run as UID 0 (root) and fail to start the container if it does. If unset or false, no such validation will be performed. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.

Property	Type	Description
runAsUser	integer	The UID to run the entrypoint of the container process. Defaults to user specified in image metadata if unspecified. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.
seLinuxOptions	object	The SELinux context to be applied to the container. If unspecified, the container runtime will allocate a random SELinux context for each container. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.
seccompProfile	object	The seccomp options to use by this container. If seccomp options are provided at both the pod & container level, the container options override the pod options. Note that this field cannot be set when spec.os.name is windows.
windowsOptions	object	The Windows specific settings applied to all containers. If unspecified, the options from the PodSecurityContext will be used. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is linux.

11.1.108. .spec.containers[].securityContext.appArmorProfile

Description

appArmorProfile is the AppArmor options to use by this container. If set, this profile overrides the pod's appArmorProfile. Note that this field cannot be set when spec.os.name is windows.

Type**object****Required**

- **type**

Property	Type	Description
localhostProfile	string	localhostProfile indicates a profile loaded on the node that should be used. The profile must be preconfigured on the node to work. Must match the loaded name of the profile. Must be set if and only if type is "Localhost".
type	string	type indicates which kind of AppArmor profile will be applied. Valid options are: Localhost - a profile pre-loaded on the node. RuntimeDefault - the container runtime's default profile. Unconfined - no AppArmor enforcement.

11.1.109. .spec.containers[].securityContext.capabilities**Description**

The capabilities to add/drop when running containers. Defaults to the default set of capabilities granted by the container runtime. Note that this field cannot be set when spec.os.name is windows.

Type**object**

Property	Type	Description
add	array (string)	Added capabilities
drop	array (string)	Removed capabilities

11.1.110. .spec.containers[].securityContext.seLinuxOptions**Description**

The SELinux context to be applied to the container. If unspecified, the container runtime will allocate a random SELinux context for each container. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.

Type

object

Property	Type	Description
level	string	Level is SELinux level label that applies to the container.
role	string	Role is a SELinux role label that applies to the container.
type	string	Type is a SELinux type label that applies to the container.
user	string	User is a SELinux user label that applies to the container.

11.1.111. .spec.containers[].securityContext.seccompProfile**Description**

The seccomp options to use by this container. If seccomp options are provided at both the pod & container level, the container options override the pod options. Note that this field cannot be set when spec.os.name is windows.

Type**object****Required**

- **type**

Property	Type	Description
localhostProfile	string	localhostProfile indicates a profile defined in a file on the node should be used. The profile must be preconfigured on the node to work. Must be a descending path, relative to the kubelet's configured seccomp profile location. Must be set if type is "Localhost". Must NOT be set for any other type.

Property	Type	Description
type	string	type indicates which kind of seccomp profile will be applied. Valid options are: Localhost - a profile defined in a file on the node should be used. RuntimeDefault - the container runtime default profile should be used. Unconfined - no profile should be applied.

11.1.112. .spec.containers[].securityContext.windowsOptions

Description

The Windows specific settings applied to all containers. If unspecified, the options from the PodSecurityContext will be used. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is linux.

Type

object

Property	Type	Description
gmsaCredentialSpec	string	GMSACredentialSpec is where the GMSA admission webhook (https://github.com/kubernetes-sigs/windows-gmsa) inlines the contents of the GMSA credential spec named by the GMSACredentialSpecName field.
gmsaCredentialSpecName	string	GMSACredentialSpecName is the name of the GMSA credential spec to use.
hostProcess	boolean	HostProcess determines if a container should be run as a 'Host Process' container. All of a Pod's containers must have the same effective HostProcess value (it is not allowed to have a mix of HostProcess containers and non-HostProcess containers). In addition, if HostProcess is true then HostNetwork must also be set to true.

Property	Type	Description
runAsUserName	string	The UserName in Windows to run the entrypoint of the container process. Defaults to the user specified in image metadata if unspecified. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.

11.1.113. .spec.containers[].startupProbe

Description

StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info:

<https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
failureThreshold	integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
grpc	object	GRPC specifies a GRPC HealthCheckRequest.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
initialDelaySeconds	integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Property	Type	Description
periodSeconds	integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	object	TCPSocket specifies a connection to a TCP port.
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully upon probe failure. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. If this value is nil, the pod's <code>terminationGracePeriodSeconds</code> will be used. Otherwise, this value overrides the value provided by the pod spec. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). This is a beta field and requires enabling <code>ProbeTerminationGracePeriod</code> feature gate. Minimum value is 1. <code>spec.terminationGracePeriodSeconds</code> is used if unset.
timeoutSeconds	integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

11.1.114. `spec.containers[].startupProbe.exec`

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

11.1.115. .spec.containers[].startupProbe.grpc**Description**

GRPC specifies a GRPC HealthCheckRequest.

Type

object

Required

- **port**

Property	Type	Description
port	integer	Port number of the gRPC service. Number must be in the range 1 to 65535.
service	string	Service is the name of the service to place in the gRPC HealthCheckRequest (see https://github.com/grpc/grpc/blob/master/doc/health-checking.md). If this is not specified, the default behavior is defined by gRPC.

11.1.116. .spec.containers[].startupProbe.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

11.1.117. .spec.containers[].startupProbe.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

11.1.118. .spec.containers[].startupProbe.httpGet.httpHeaders[]**Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

11.1.119. .spec.containers[].startupProbe.tcpSocket**Description**

TCPSocket specifies a connection to a TCP port.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

11.1.120. .spec.containers[].volumeDevices**Description**

volumeDevices is the list of block devices to be used by the container.

Type

array

11.1.121. .spec.containers[].volumeDevices[]**Description**

volumeDevice describes a mapping of a raw block device within a container.

Type**object****Required**

- **devicePath**
- **name**

Property	Type	Description
devicePath	string	devicePath is the path inside of the container that the device will be mapped to.
name	string	name must match the name of a persistentVolumeClaim in the pod

11.1.122. .spec.containers[].volumeMounts

Description

Pod volumes to mount into the container's filesystem. Cannot be updated.

Type**array**

11.1.123. .spec.containers[].volumeMounts[]

Description

VolumeMount describes a mounting of a Volume within a container.

Type**object****Required**

- **mountPath**
- **name**

Property	Type	Description
mountPath	string	Path within the container at which the volume should be mounted. Must not contain '.'.

Property	Type	Description
mountPropagation	string	mountPropagation determines how mounts are propagated from the host to container and the other way around. When not set, MountPropagationNone is used. This field is beta in 1.10. When RecursiveReadOnly is set to IfPossible or to Enabled, MountPropagation must be None or unspecified (which defaults to None).
name	string	This must match the Name of a Volume.
readOnly	boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
recursiveReadOnly	string	RecursiveReadOnly specifies whether read-only mounts should be handled recursively. If ReadOnly is false, this field has no meaning and must be unspecified. If ReadOnly is true, and this field is set to Disabled, the mount is not made recursively read-only. If this field is set to IfPossible, the mount is made recursively read-only, if it is supported by the container runtime. If this field is set to Enabled, the mount is made recursively read-only if it is supported by the container runtime, otherwise the pod will not be started and an error will be generated to indicate the reason. If this field is set to IfPossible or Enabled, MountPropagation must be set to None (or be unspecified, which defaults to None). If this field is not specified, it is treated as an equivalent of Disabled.

Property	Type	Description
subPath	string	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root).
subPathExpr	string	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

11.1.124. .spec.dnsConfig

Description

Defines the DNS configuration for the pods.

Type

object

Property	Type	Description
nameservers	array (string)	A list of DNS name server IP addresses. This will be appended to the base nameservers generated from DNSPolicy.
options	array	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Resolution options given in Options will override those that appear in the base DNSPolicy.
options[]	object	PodDNSConfigOption defines DNS resolver options of a pod.
searches	array (string)	A list of DNS search domains for host-name lookup. This will be appended to the base search paths generated from DNSPolicy.

11.1.125. .spec.dnsConfig.options

Description

A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Resolution options given in Options will override those that appear in the base DNSPolicy.

Type

array

11.1.126. .spec.dnsConfig.options[]**Description**

PodDNSConfigOption defines DNS resolver options of a pod.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name is required and must be unique.
value	string	Value is optional.

11.1.127. .spec.excludedFromEnforcement**Description**

List of references to PrometheusRule objects to be excluded from enforcing a namespace label of origin. Applies only if enforcedNamespaceLabel set to true.

Type

array

11.1.128. .spec.excludedFromEnforcement[]**Description**

ObjectReference references a PodMonitor, ServiceMonitor, Probe or PrometheusRule object.

Type

object

Required

- **namespace**
- **resource**

Property	Type	Description
group	string	Group of the referent. When not specified, it defaults to monitoring.coreos.com
name	string	Name of the referent. When not set, all resources in the namespace are matched.
namespace	string	Namespace of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces/
resource	string	Resource of the referent.

11.1.129. .spec.grpcServerTlsConfig

Description

GRPCServerTLSConfig configures the gRPC server from which Thanos Querier reads recorded rule data. Note: Currently only the CAFile, CertFile, and KeyFile fields are supported. Maps to the '--grpc-server-tls-*' CLI args.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
caFile	string	Path to the CA cert in the Prometheus container to use for the targets.
cert	object	Client certificate to present when doing client-authentication.
certFile	string	Path to the client cert file in the Prometheus container for the targets.
insecureSkipVerify	boolean	Disable target certificate validation.

Property	Type	Description
keyFile	string	Path to the client key file in the Prometheus container for the targets.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

11.1.130. .spec.grpcServerTlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

11.1.131. .spec.grpcServerTlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

11.1.132. .spec.grpcServerTlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.133. .spec.grpcServerTlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

11.1.134. .spec.grpcServerTlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

11.1.135. .spec.grpcServerTlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object**Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.136. .spec.grpcServerTlsConfig.keySecret**Description**

Secret containing the client key file for the targets.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

11.1.137. .spec.hostAliases

Description

Pods' hostAliases configuration

Type

array

11.1.138. .spec.hostAliases[]

Description

HostAlias holds the mapping between IP and hostnames that will be injected as an entry in the pod's hosts file.

Type

object

Required

- **hostnames**
- **ip**

Property	Type	Description
hostnames	array (string)	Hostnames for the above IP address.
ip	string	IP address of the host file entry.

11.1.139. .spec.imagePullSecrets

Description

An optional list of references to secrets in the same namespace to use for pulling thanos images from registries see <http://kubernetes.io/docs/user-guide/images#specifying-imagepullsecrets-on-a-pod>

Type

array

11.1.140. .spec.imagePullSecrets[]

Description

LocalObjectReference contains enough information to let you locate the referenced object inside the same namespace.

Type**object**

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

11.1.141. .spec.initContainers

Description

InitContainers allows adding initContainers to the pod definition. Those can be used to e.g. fetch secrets for injection into the ThanosRuler configuration from external sources. Any errors during the execution of an initContainer will lead to a restart of the Pod. More info:

<https://kubernetes.io/docs/concepts/workloads/pods/init-containers/> Using initContainers for any use case other than secret fetching is entirely outside the scope of what the maintainers will support and by doing so, you accept that this behaviour may break at any time without notice.

Type**array**

11.1.142. .spec.initContainers[]

Description

A single application container that you want to run within a pod.

Type**object****Required**

- **name**

Property	Type	Description

Property	Type	Description
args	array (string)	Arguments to the endpoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$(VAR_NAME)" will produce the string literal "\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
command	array (string)	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$(VAR_NAME)" will produce the string literal "\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	array	List of environment variables to set in the container. Cannot be updated.

Property	Type	Description
env[]	object	EnvVar represents an environment variable present in a Container.
envFrom	array	List of sources to populate environment variables in the container. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.
envFrom[]	object	EnvFromSource represents the source of a set of ConfigMaps or Secrets
image	string	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
imagePullPolicy	string	Image pull policy. One of Always, Never, IfNotPresent. Defaults to Always if :latest tag is specified, or IfNotPresent otherwise. Cannot be updated. More info: https://kubernetes.io/docs/concepts/containers/images#updating-images
lifecycle	object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.

Property	Type	Description
livenessProbe	object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	string	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	array	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
ports[]	object	ContainerPort represents a network port in a single container.
readinessProbe	object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
resizePolicy	array	Resources resize policy for the container.
resizePolicy[]	object	ContainerResizePolicy represents resource resize policy for the container.

Property	Type	Description
resources	object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
restartPolicy	string	RestartPolicy defines the restart behavior of individual containers in a pod. This field may only be set for init containers, and the only allowed value is "Always". For non-init containers or when this field is not specified, the restart behavior is defined by the Pod's restart policy and the container type. Setting the RestartPolicy as "Always" for the init container will have the following effect: this init container will be continually restarted on exit until all regular containers have terminated. Once all regular containers have completed, all init containers with restartPolicy "Always" will be shut down. This lifecycle differs from normal init containers and is often referred to as a "sidecar" container. Although this init container still starts in the init container sequence, it does not wait for the container to complete before proceeding to the next init container. Instead, the next init container starts immediately after this init container is started, or after any startupProbe has successfully completed.
securityContext	object	SecurityContext defines the security options the container should be run with. If set, the fields of SecurityContext override the equivalent fields of PodSecurityContext. More info: https://kubernetes.io/docs/tasks/configure-pod-container/security-context/

Property	Type	Description
startupProbe	object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
stdinOnce	boolean	Whether the container runtime should close the stdin channel after it has been opened by a single attach. When stdin is true the stdin stream will remain open across multiple attach sessions. If stdinOnce is set to true, stdin is opened on container start, is empty until the first client attaches to stdin, and then remains open and accepts data until the client disconnects, at which time stdin is closed and remains closed until the container is restarted. If this flag is false, a container processes that reads from stdin will never receive an EOF. Default is false

Property	Type	Description
terminationMessagePath	string	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.
terminationMessagePolicy	string	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated.
tty	boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeDevices	array	volumeDevices is the list of block devices to be used by the container.
volumeDevices[]	object	volumeDevice describes a mapping of a raw block device within a container.
volumeMounts	array	Pod volumes to mount into the container's filesystem. Cannot be updated.

Property	Type	Description
volumeMounts[]	object	VolumeMount describes a mounting of a Volume within a container.
workingDir	string	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated.

11.1.143. .spec.initContainers[].env

Description

List of environment variables to set in the container. Cannot be updated.

Type

array

11.1.144. .spec.initContainers[].env[]

Description

EnvVar represents an environment variable present in a Container.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name of the environment variable. Must be a C_IDENTIFIER.

Property	Type	Description
value	string	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	object	Source for the environment variable's value. Cannot be used if value is not empty.

11.1.145. .spec.initContainers[].env[].valueFrom

Description

Source for the environment variable's value. Cannot be used if value is not empty.

Type

object

Property	Type	Description
configMapKeyRef	object	Selects a key of a ConfigMap.
fieldRef	object	Selects a field of the pod: supports metadata.name, metadata.namespace, metadata.labels['<KEY>'] , metadata.annotations['<KEY>'] , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.

Property	Type	Description
resourceFieldRef	object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, limits.ephemeral-storage, requests.cpu, requests.memory and requests.ephemeral-storage) are currently supported.
secretKeyRef	object	Selects a key of a secret in the pod's namespace

11.1.146. .spec.initContainers[].env[].valueFrom.configMapKeyRef

Description

Selects a key of a ConfigMap.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

11.1.147. .spec.initContainers[].env[].valueFrom.fieldRef

Description

Selects a field of the pod: supports metadata.name, metadata.namespace, **metadata.labels['<KEY>']**, **metadata.annotations['<KEY>']**, spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.

Type

object

Required

- **fieldPath**

Property	Type	Description
apiVersion	string	Version of the schema the FieldPath is written in terms of, defaults to "v1".
fieldPath	string	Path of the field to select in the specified API version.

11.1.148. .spec.initContainers[].env[].valueFrom.resourceFieldRef

Description

Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, limits.ephemeral-storage, requests.cpu, requests.memory and requests.ephemeral-storage) are currently supported.

Type

object

Required

- **resource**

Property	Type	Description
containerName	string	Container name: required for volumes, optional for env vars
divisor	integer-or-string	Specifies the output format of the exposed resources, defaults to "1"
resource	string	Required: resource to select

11.1.149. .spec.initContainers[].env[].valueFrom.secretKeyRef

Description

Selects a key of a secret in the pod's namespace

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.150. .spec.initContainers[].envFrom

Description

List of sources to populate environment variables in the container. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Type

array

11.1.151. .spec.initContainers[].envFrom[]

Description

EnvFromSource represents the source of a set of ConfigMaps or Secrets

Type

object

Property	Type	Description
configMapRef	object	The ConfigMap to select from
prefix	string	Optional text to prepend to the name of each environment variable. Must be a C_IDENTIFIER.
secretRef	object	The Secret to select from

11.1.152. .spec.initContainers[].envFrom[].configMapRef

Description

The ConfigMap to select from

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap must be defined

11.1.153. .spec.initContainers[].envFrom[].secretRef

Description

The Secret to select from

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret must be defined

11.1.154. .spec.initContainers[].lifecycle

Description

Actions that the management system should take in response to container lifecycle events. Cannot be updated.

Type
object

Property	Type	Description
postStart	object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
stopSignal	string	StopSignal defines which signal will be sent to a container when it is being stopped. If not specified, the default is defined by the container runtime in use. StopSignal can only be set for Pods with a non-empty .spec.os.name

11.1.155. .spec.initContainers[].lifecycle.postStart

Description

PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: <https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
sleep	object	Sleep represents a duration that the container should sleep.
tcpSocket	object	Deprecated. TCPSocket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

11.1.156. .spec.initContainers[].lifecycle.postStart.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

11.1.157. .spec.initContainers[].lifecycle.postStart.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.

Property	Type	Description
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

11.1.158. .spec.initContainers[].lifecycle.postStart.httpGet.httpHeaders

Description

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

11.1.159. .spec.initContainers[].lifecycle.postStart.httpGet.httpHeaders[]

Description

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

11.1.160. .spec.initContainers[].lifecycle.postStart.sleep

Description

Sleep represents a duration that the container should sleep.

Type

object

Required

- **seconds**

Property	Type	Description
seconds	integer	Seconds is the number of seconds to sleep.

11.1.161. .spec.initContainers[].lifecycle.postStart.tcpSocket**Description**

Deprecated. TCP Socket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

11.1.162. .spec.initContainers[].lifecycle.preStop**Description**

PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: <https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
sleep	object	Sleep represents a duration that the container should sleep.
tcpSocket	object	Deprecated. TCPSocket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

11.1.163. .spec.initContainers[].lifecycle.preStop.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

11.1.164. .spec.initContainers[].lifecycle.preStop.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

11.1.165. .spec.initContainers[].lifecycle.preStop.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

11.1.166. .spec.initContainers[].lifecycle.preStop.httpGet.httpHeaders[]**Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

11.1.167. .spec.initContainers[].lifecycle.preStop.sleep

Description

Sleep represents a duration that the container should sleep.

Type

object

Required

- **seconds**

Property	Type	Description
seconds	integer	Seconds is the number of seconds to sleep.

11.1.168. .spec.initContainers[].lifecycle.preStop.tcpSocket

Description

Deprecated. TCP Socket is NOT supported as a LifecycleHandler and kept for backward compatibility. There is no validation of this field and lifecycle hooks will fail at runtime when it is specified.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.

Property	Type	Description
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

11.1.169. .spec.initContainers[].livenessProbe

Description

Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: <https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
failureThreshold	integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
grpc	object	GRPC specifies a GRPC HealthCheckRequest.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
initialDelaySeconds	integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.

Property	Type	Description
successThreshold	integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	object	TCPSocket specifies a connection to a TCP port.
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully upon probe failure. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. If this value is nil, the pod's terminationGracePeriodSeconds will be used. Otherwise, this value overrides the value provided by the pod spec. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). This is a beta field and requires enabling ProbeTerminationGracePeriod feature gate. Minimum value is 1. spec.terminationGracePeriodSeconds is used if unset.
timeoutSeconds	integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

11.1.170. .spec.initContainers[].livenessProbe.exec

Description

Exec specifies a command to execute in the container.

Type
object

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

11.1.171. .spec.initContainers[].livenessProbe.grpc

Description

GRPC specifies a GRPC HealthCheckRequest.

Type
object

Required

- **port**

Property	Type	Description
port	integer	Port number of the gRPC service. Number must be in the range 1 to 65535.
service	string	Service is the name of the service to place in the gRPC HealthCheckRequest (see https://github.com/grpc/grpc/blob/master/doc/health-checking.md). If this is not specified, the default behavior is defined by gRPC.

11.1.172. .spec.initContainers[].livenessProbe.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type**object****Required**

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

11.1.173. .spec.initContainers[].livenessProbe.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type**array****11.1.174. .spec.initContainers[].livenessProbe.httpGet.httpHeaders[]****Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type**object****Required**

- **name**

- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

11.1.175. .spec.initContainers[].livenessProbe.tcpSocket

Description

TCPSocket specifies a connection to a TCP port.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

11.1.176. .spec.initContainers[].ports

Description

List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See <https://github.com/kubernetes/kubernetes/issues/108255>. Cannot be updated.

Type

array

11.1.177. .spec.initContainers[].ports[]

Description

ContainerPort represents a network port in a single container.

Type

object

Required

- **containerPort**

Property	Type	Description
containerPort	integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
hostIP	string	What host IP to bind the external port to.
hostPort	integer	Number of port to expose on the host. If specified, this must be a valid port number, $0 < x < 65536$. If HostNetwork is specified, this must match ContainerPort. Most containers do not need this.
name	string	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services.
protocol	string	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP".

11.1.178. .spec.initContainers[].readinessProbe

Description

Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info:

<https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.

Property	Type	Description
failureThreshold	integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
grpc	object	GRPC specifies a GRPC HealthCheckRequest.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
initialDelaySeconds	integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	object	TCPSocket specifies a connection to a TCP port.

Property	Type	Description
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully upon probe failure. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. If this value is nil, the pod's terminationGracePeriodSeconds will be used. Otherwise, this value overrides the value provided by the pod spec. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). This is a beta field and requires enabling ProbeTerminationGracePeriod feature gate. Minimum value is 1. spec.terminationGracePeriodSeconds is used if unset.
timeoutSeconds	integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

11.1.179. .spec.initContainers[].readinessProbe.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

11.1.180. .spec.initContainers[].readinessProbe.grpc

Description

GRPC specifies a GRPC HealthCheckRequest.

Type

object

Required

- **port**

Property	Type	Description
port	integer	Port number of the gRPC service. Number must be in the range 1 to 65535.
service	string	Service is the name of the service to place in the gRPC HealthCheckRequest (see https://github.com/grpc/grpc/blob/master/doc/health-checking.md). If this is not specified, the default behavior is defined by gRPC.

11.1.181. .spec.initContainers[].readinessProbe.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

11.1.182. .spec.initContainers[].readinessProbe.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

11.1.183. .spec.initContainers[].readinessProbe.httpGet.httpHeaders[]**Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

11.1.184. .spec.initContainers[].readinessProbe.tcpSocket

Description

TCP socket specifies a connection to a TCP port.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

11.1.185. .spec.initContainers[].resizePolicy

Description

Resources resize policy for the container.

Type

array

11.1.186. .spec.initContainers[].resizePolicy[]

Description

ContainerResizePolicy represents resource resize policy for the container.

Type

object

Required

- **resourceName**

- **restartPolicy**

Property	Type	Description
resourceName	string	Name of the resource to which this resource resize policy applies. Supported values: cpu, memory.
restartPolicy	string	Restart policy to apply when specified resource is resized. If not specified, it defaults to NotRequired.

11.1.187. .spec.initContainers[].resources

Description

Compute Resources required by this container. Cannot be updated. More info: <https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/>

Type

object

Property	Type	Description
claims	array	Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate. This field is immutable. It can only be set for containers.
claims[]	object	ResourceClaim references one entry in PodSpec.ResourceClaims.
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Property	Type	Description
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

11.1.188. .spec.initContainers[].resources.claims

Description

Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate.

This field is immutable. It can only be set for containers.

Type

array

11.1.189. .spec.initContainers[].resources.claims[]

Description

ResourceClaim references one entry in PodSpec.ResourceClaims.

Type

object

Required

- **name**

Property	Type	Description
name	string	Name must match the name of one entry in pod.spec.resourceClaims of the Pod where this field is used. It makes that resource available inside a container.

Property	Type	Description
request	string	Request is the name chosen for a request in the referenced claim. If empty, everything from the claim is made available, otherwise only the result of this request.

11.1.190. .spec.initContainers[].securityContext

Description

SecurityContext defines the security options the container should be run with. If set, the fields of SecurityContext override the equivalent fields of PodSecurityContext. More info:

<https://kubernetes.io/docs/tasks/configure-pod-container/security-context/>

Type

object

Property	Type	Description
allowPrivilegeEscalation	boolean	AllowPrivilegeEscalation controls whether a process can gain more privileges than its parent process. This bool directly controls if the no_new_privs flag will be set on the container process. AllowPrivilegeEscalation is true always when the container is: 1) run as Privileged 2) has CAP_SYS_ADMIN Note that this field cannot be set when spec.os.name is windows.
appArmorProfile	object	appArmorProfile is the AppArmor options to use by this container. If set, this profile overrides the pod's appArmorProfile. Note that this field cannot be set when spec.os.name is windows.
capabilities	object	The capabilities to add/drop when running containers. Defaults to the default set of capabilities granted by the container runtime. Note that this field cannot be set when spec.os.name is windows.

Property	Type	Description
privileged	boolean	Run container in privileged mode. Processes in privileged containers are essentially equivalent to root on the host. Defaults to false. Note that this field cannot be set when spec.os.name is windows.
procMount	string	procMount denotes the type of proc mount to use for the containers. The default value is Default which uses the container runtime defaults for readonly paths and masked paths. This requires the ProcMountType feature flag to be enabled. Note that this field cannot be set when spec.os.name is windows.
readOnlyRootFilesystem	boolean	Whether this container has a read-only root filesystem. Default is false. Note that this field cannot be set when spec.os.name is windows.
runAsGroup	integer	The GID to run the entrypoint of the container process. Uses runtime default if unset. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.
runAsNonRoot	boolean	Indicates that the container must run as a non-root user. If true, the Kubelet will validate the image at runtime to ensure that it does not run as UID 0 (root) and fail to start the container if it does. If unset or false, no such validation will be performed. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.

Property	Type	Description
runAsUser	integer	The UID to run the entrypoint of the container process. Defaults to user specified in image metadata if unspecified. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.
seLinuxOptions	object	The SELinux context to be applied to the container. If unspecified, the container runtime will allocate a random SELinux context for each container. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.
seccompProfile	object	The seccomp options to use by this container. If seccomp options are provided at both the pod & container level, the container options override the pod options. Note that this field cannot be set when spec.os.name is windows.
windowsOptions	object	The Windows specific settings applied to all containers. If unspecified, the options from the PodSecurityContext will be used. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is linux.

11.1.191. .spec.initContainers[].securityContext.appArmorProfile

Description

appArmorProfile is the AppArmor options to use by this container. If set, this profile overrides the pod's appArmorProfile. Note that this field cannot be set when spec.os.name is windows.

Type**object****Required**

- **type**

Property	Type	Description
localhostProfile	string	localhostProfile indicates a profile loaded on the node that should be used. The profile must be preconfigured on the node to work. Must match the loaded name of the profile. Must be set if and only if type is "Localhost".
type	string	type indicates which kind of AppArmor profile will be applied. Valid options are: Localhost - a profile pre-loaded on the node. RuntimeDefault - the container runtime's default profile. Unconfined - no AppArmor enforcement.

11.1.192. .spec.initContainers[].securityContext.capabilities

Description

The capabilities to add/drop when running containers. Defaults to the default set of capabilities granted by the container runtime. Note that this field cannot be set when spec.os.name is windows.

Type**object**

Property	Type	Description
add	array (string)	Added capabilities
drop	array (string)	Removed capabilities

11.1.193. .spec.initContainers[].securityContext.seLinuxOptions

Description

The SELinux context to be applied to the container. If unspecified, the container runtime will allocate a random SELinux context for each container. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is windows.

Type

object

Property	Type	Description
level	string	Level is SELinux level label that applies to the container.
role	string	Role is a SELinux role label that applies to the container.
type	string	Type is a SELinux type label that applies to the container.
user	string	User is a SELinux user label that applies to the container.

11.1.194. .spec.initContainers[].securityContext.seccompProfile**Description**

The seccomp options to use by this container. If seccomp options are provided at both the pod & container level, the container options override the pod options. Note that this field cannot be set when spec.os.name is windows.

Type**object****Required**

- **type**

Property	Type	Description
localhostProfile	string	localhostProfile indicates a profile defined in a file on the node should be used. The profile must be preconfigured on the node to work. Must be a descending path, relative to the kubelet's configured seccomp profile location. Must be set if type is "Localhost". Must NOT be set for any other type.

Property	Type	Description
type	string	type indicates which kind of seccomp profile will be applied. Valid options are: Localhost - a profile defined in a file on the node should be used. RuntimeDefault - the container runtime default profile should be used. Unconfined - no profile should be applied.

11.1.195. .spec.initContainers[].securityContext.windowsOptions

Description

The Windows specific settings applied to all containers. If unspecified, the options from the PodSecurityContext will be used. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is linux.

Type

object

Property	Type	Description
gmsaCredentialSpec	string	GMSACredentialSpec is where the GMSA admission webhook (https://github.com/kubernetes-sigs/windows-gmsa) inlines the contents of the GMSA credential spec named by the <code>GMSACredentialSpecName</code> field.
gmsaCredentialSpecName	string	GMSACredentialSpecName is the name of the GMSA credential spec to use.
hostProcess	boolean	HostProcess determines if a container should be run as a 'Host Process' container. All of a Pod's containers must have the same effective HostProcess value (it is not allowed to have a mix of HostProcess containers and non-HostProcess containers). In addition, if HostProcess is true then HostNetwork must also be set to true.

Property	Type	Description
runAsUserName	string	The UserName in Windows to run the entrypoint of the container process. Defaults to the user specified in image metadata if unspecified. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.

11.1.196. .spec.initContainers[].startupProbe

Description

StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info:

<https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes>

Type

object

Property	Type	Description
exec	object	Exec specifies a command to execute in the container.
failureThreshold	integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
grpc	object	GRPC specifies a GRPC HealthCheckRequest.
httpGet	object	HTTPGet specifies an HTTP GET request to perform.
initialDelaySeconds	integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Property	Type	Description
periodSeconds	integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	object	TCPSocket specifies a connection to a TCP port.
terminationGracePeriodSeconds	integer	Optional duration in seconds the pod needs to terminate gracefully upon probe failure. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. If this value is nil, the pod's terminationGracePeriodSeconds will be used. Otherwise, this value overrides the value provided by the pod spec. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). This is a beta field and requires enabling ProbeTerminationGracePeriod feature gate. Minimum value is 1. spec.terminationGracePeriodSeconds is used if unset.
timeoutSeconds	integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

11.1.197. .spec.initContainers[].startupProbe.exec

Description

Exec specifies a command to execute in the container.

Type

object

Property	Type	Description
command	array (string)	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

11.1.198. .spec.initContainers[].startupProbe.grpc**Description**

GRPC specifies a GRPC HealthCheckRequest.

Type

object

Required

- **port**

Property	Type	Description
port	integer	Port number of the gRPC service. Number must be in the range 1 to 65535.
service	string	Service is the name of the service to place in the gRPC HealthCheckRequest (see https://github.com/grpc/grpc/blob/master/doc/health-checking.md). If this is not specified, the default behavior is defined by gRPC.

11.1.199. .spec.initContainers[].startupProbe.httpGet

Description

HTTPGet specifies an HTTP GET request to perform.

Type

object

Required

- **port**

Property	Type	Description
host	string	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	array	Custom headers to set in the request. HTTP allows repeated headers.
httpHeaders[]	object	HTTPHeader describes a custom header to be used in HTTP probes
path	string	Path to access on the HTTP server.
port	integer-or-string	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	string	Scheme to use for connecting to the host. Defaults to HTTP.

11.1.200. .spec.initContainers[].startupProbe.httpGet.httpHeaders**Description**

Custom headers to set in the request. HTTP allows repeated headers.

Type

array

11.1.201. .spec.initContainers[].startupProbe.httpGet.httpHeaders[]**Description**

HTTPHeader describes a custom header to be used in HTTP probes

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	The header field name. This will be canonicalized upon output, so case-variant names will be understood as the same header.
value	string	The header field value

11.1.202. .spec.initContainers[].startupProbe.tcpSocket**Description**

TCP socket specifies a connection to a TCP port.

Type

object

Required

- **port**

Property	Type	Description
host	string	Optional: Host name to connect to, defaults to the pod IP.
port	integer-or-string	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

11.1.203. .spec.initContainers[].volumeDevices**Description**

volumeDevices is the list of block devices to be used by the container.

Type

array

11.1.204. .spec.initContainers[].volumeDevices[]**Description**

volumeDevice describes a mapping of a raw block device within a container.

Type

object

Required

- **devicePath**
- **name**

Property	Type	Description
devicePath	string	devicePath is the path inside of the container that the device will be mapped to.
name	string	name must match the name of a persistentVolumeClaim in the pod

11.1.205. .spec.initContainers[].volumeMounts

Description

Pod volumes to mount into the container's filesystem. Cannot be updated.

Type

array

11.1.206. .spec.initContainers[].volumeMounts[]

Description

VolumeMount describes a mounting of a Volume within a container.

Type

object

Required

- **mountPath**
- **name**

Property	Type	Description
mountPath	string	Path within the container at which the volume should be mounted. Must not contain '.'.

Property	Type	Description
mountPropagation	string	mountPropagation determines how mounts are propagated from the host to container and the other way around. When not set, MountPropagationNone is used. This field is beta in 1.10. When RecursiveReadOnly is set to IfPossible or to Enabled, MountPropagation must be None or unspecified (which defaults to None).
name	string	This must match the Name of a Volume.
readOnly	boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
recursiveReadOnly	string	RecursiveReadOnly specifies whether read-only mounts should be handled recursively. If ReadOnly is false, this field has no meaning and must be unspecified. If ReadOnly is true, and this field is set to Disabled, the mount is not made recursively read-only. If this field is set to IfPossible, the mount is made recursively read-only, if it is supported by the container runtime. If this field is set to Enabled, the mount is made recursively read-only if it is supported by the container runtime, otherwise the pod will not be started and an error will be generated to indicate the reason. If this field is set to IfPossible or Enabled, MountPropagation must be set to None (or be unspecified, which defaults to None). If this field is not specified, it is treated as an equivalent of Disabled.

Property	Type	Description
subPath	string	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root).
subPathExpr	string	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

11.1.207. .spec.objectStorageConfig

Description

Configures object storage.

The configuration format is defined at <https://thanos.io/tip/thanos/storage.md/#configuring-access-to-object-storage>

The operator performs no validation of the configuration.

objectStorageConfigFile takes precedence over this field.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

11.1.208. .spec.podMetadata

Description

PodMetadata configures labels and annotations which are propagated to the ThanosRuler pods. The following items are reserved and cannot be overridden: * "app.kubernetes.io/name" label, set to "thanos-ruler". * "app.kubernetes.io/managed-by" label, set to "prometheus-operator". * "app.kubernetes.io/instance" label, set to the name of the ThanosRuler instance. * "thanos-ruler" label, set to the name of the ThanosRuler instance. * "kubectrl.kubernetes.io/default-container" annotation, set to "thanos-ruler".

Type

object

Property	Type	Description
annotations	object (string)	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations/
labels	object (string)	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/

Property	Type	Description
name	string	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/

11.1.209. .spec.prometheusRulesExcludedFromEnforce

Description

PrometheusRulesExcludedFromEnforce - list of Prometheus rules to be excluded from enforcing of adding namespace labels. Works only if enforcedNamespaceLabel set to true. Make sure both ruleNamespace and ruleName are set for each pair Deprecated: use excludedFromEnforcement instead.

Type

array

11.1.210. .spec.prometheusRulesExcludedFromEnforce[]

Description

PrometheusRuleExcludeConfig enables users to configure excluded PrometheusRule names and their namespaces to be ignored while enforcing namespace label for alerts and metrics.

Type

object

Required

- **ruleName**
- **ruleNamespace**

Property	Type	Description
ruleName	string	Name of the excluded PrometheusRule object.
ruleNamespace	string	Namespace of the excluded PrometheusRule object.

11.1.211. .spec.queryConfig

Description

Configures the list of Thanos Query endpoints from which to query metrics.

The configuration format is defined at <https://thanos.io/tip/components/rule.md/#query-api>

It requires Thanos $\geq$ v0.11.0.

The operator performs no validation of the configuration.

This field takes precedence over **queryEndpoints**.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.212. .spec.remoteWrite

Description

Defines the list of remote write configurations.

When the list isn't empty, the ruler is configured with stateless mode.

It requires Thanos $\geq$ 0.24.0.

Type

array

11.1.213. .spec.remoteWrite[]

Description

RemoteWriteSpec defines the configuration to write samples from Prometheus to a remote endpoint.

Type

object

Required

- **url**

Property	Type	Description
authorization	object	Authorization section for the URL. It requires Prometheus >= v2.26.0 or Thanos >= v0.24.0. Cannot be set at the same time as sigv4, basicAuth, oauth2, or azureAd.
azureAd	object	AzureAD for the URL. It requires Prometheus >= v2.45.0 or Thanos >= v0.31.0. Cannot be set at the same time as authorization, basicAuth, oauth2, or sigv4.
basicAuth	object	BasicAuth configuration for the URL. Cannot be set at the same time as sigv4, authorization, oauth2, or azureAd.
bearerToken	string	Warning: this field shouldn't be used because the token value appears in clear-text. Prefer using authorization. Deprecated: this will be removed in a future release.
bearerTokenFile	string	File from which to read bearer token for the URL. Deprecated: this will be removed in a future release. Prefer using authorization.
enableHTTP2	boolean	Whether to enable HTTP2.

Property	Type	Description
followRedirects	boolean	Configure whether HTTP requests follow HTTP 3xx redirects. It requires Prometheus $\geq$ v2.26.0 or Thanos $\geq$ v0.24.0.
headers	object (string)	Custom HTTP headers to be sent along with each remote write request. Be aware that headers that are set by Prometheus itself can't be overwritten. It requires Prometheus $\geq$ v2.25.0 or Thanos $\geq$ v0.24.0.
messageVersion	string	The Remote Write message's version to use when writing to the endpoint. Version1.0 corresponds to the prometheus.WriteRequest protobuf message introduced in Remote Write 1.0. Version2.0 corresponds to the io.prometheus.write.v2.Request protobuf message introduced in Remote Write 2.0. When Version2.0 is selected, Prometheus will automatically be configured to append the metadata of scraped metrics to the WAL. Before setting this field, consult with your remote storage provider what message version it supports. It requires Prometheus $\geq$ v2.54.0 or Thanos $\geq$ v0.37.0.
metadataConfig	object	MetadataConfig configures the sending of series metadata to the remote storage.

Property	Type	Description
name	string	The name of the remote write queue, it must be unique if specified. The name is used in metrics and logging in order to differentiate queues. It requires Prometheus >= v2.15.0 or Thanos >= 0.24.0.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
oauth2	object	OAuth2 configuration for the URL. It requires Prometheus >= v2.27.0 or Thanos >= v0.24.0. Cannot be set at the same time as sigv4, authorization, basicAuth, or azureAd.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.

Property	Type	Description
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.
queueConfig	object	QueueConfig allows tuning of the remote write queue parameters.
remoteTimeout	string	Timeout for requests to the remote write endpoint.
roundRobinDNS	boolean	When enabled: - The remote-write mechanism will resolve the hostname via DNS. - It will randomly select one of the resolved IP addresses and connect to it. When disabled (default behavior): - The Go standard library will handle hostname resolution. - It will attempt connections to each resolved IP address sequentially. Note: The connection timeout applies to the entire resolution and connection process. If disabled, the timeout is distributed across all connection attempts. It requires Prometheus >= v3.1.0 or Thanos >= v0.38.0.

Property	Type	Description
sendExemplars	boolean	Enables sending of exemplars over remote write. Note that exemplar-storage itself must be enabled using the spec.enableFeatures option for exemplars to be scraped in the first place. It requires Prometheus >= v2.27.0 or Thanos >= v0.24.0.
sendNativeHistograms	boolean	Enables sending of native histograms, also known as sparse histograms over remote write. It requires Prometheus >= v2.40.0 or Thanos >= v0.30.0.
sigv4	object	Sigv4 allows to configure AWS's Signature Verification 4 for the URL. It requires Prometheus >= v2.26.0 or Thanos >= v0.24.0. Cannot be set at the same time as authorization, basicAuth, oauth2, or azureAd.
tlsConfig	object	TLS Config to use for the URL.
url	string	The URL of the endpoint to send samples to.
writeRelabelConfigs	array	The list of remote write relabel configurations.
writeRelabelConfigs[]	object	RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples. More info: https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

11.1.214. .spec.remoteWrite[].authorization

Description

Authorization section for the URL.

It requires Prometheus >= v2.26.0 or Thanos >= v0.24.0.

Cannot be set at the same time as **sigv4**, **basicAuth**, **oauth2**, or **azureAd**.

Type

object

Property	Type	Description
credentials	object	Selects a key of a Secret in the namespace that contains the credentials for authentication.
credentialsFile	string	File to read a secret from, mutually exclusive with credentials .
type	string	Defines the authentication type. The value is case-insensitive. "Basic" is not a supported value. Default: "Bearer"

11.1.215. .spec.remoteWrite[].authorization.credentials**Description**

Selects a key of a Secret in the namespace that contains the credentials for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.216. .spec.remoteWrite[].azureAd

Description

AzureAD for the URL.

It requires Prometheus >= v2.45.0 or Thanos >= v0.31.0.

Cannot be set at the same time as **authorization**, **basicAuth**, **oauth2**, or **sigv4**.

Type

object

Property	Type	Description
cloud	string	The Azure Cloud. Options are 'AzurePublic', 'AzureChina', or 'AzureGovernment'.
managedIdentity	object	ManagedIdentity defines the Azure User-assigned Managed identity. Cannot be set at the same time as oauth or sdk .
oauth	object	OAuth defines the oauth config that is being used to authenticate. Cannot be set at the same time as managedIdentity or sdk. It requires Prometheus >= v2.48.0 or Thanos >= v0.31.0.

Property	Type	Description
sdk	object	SDK defines the Azure SDK config that is being used to authenticate. See https://learn.microsoft.com/en-us/azure/developer/go/azure-sdk-authentication Cannot be set at the same time as oauth or managedIdentity. It requires Prometheus >= v2.52.0 or Thanos >= v0.36.0.

11.1.217. .spec.remoteWrite[].azureAd.managedIdentity

Description

ManagedIdentity defines the Azure User-assigned Managed identity. Cannot be set at the same time as **oauth** or **sdk**.

Type

object

Required

- **clientId**

Property	Type	Description
clientId	string	The client id

11.1.218. .spec.remoteWrite[].azureAd.oauth

Description

OAuth defines the oauth config that is being used to authenticate. Cannot be set at the same time as **managedIdentity** or **sdk**.

It requires Prometheus >= v2.48.0 or Thanos >= v0.31.0.

Type

object

Required

- **clientId**
- **clientSecret**
- **tenantId**

Property	Type	Description
clientId	string	clientId is the clientId of the Azure Active Directory application that is being used to authenticate.
clientSecret	object	clientSecret specifies a key of a Secret containing the client secret of the Azure Active Directory application that is being used to authenticate.
tenantId	string	tenantId is the tenant ID of the Azure Active Directory application that is being used to authenticate.

11.1.219. .spec.remoteWrite[].azureAd.oauth.clientSecret

Description

clientSecret specifies a key of a Secret containing the client secret of the Azure Active Directory application that is being used to authenticate.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.220. .spec.remoteWrite[].azureAd.sdk

Description

SDK defines the Azure SDK config that is being used to authenticate. See <https://learn.microsoft.com/en-us/azure/developer/go/azure-sdk-authentication> Cannot be set at the same time as **oauth** or **managedIdentity**.
It requires Prometheus >= v2.52.0 or Thanos >= v0.36.0.

Type**object**

Property	Type	Description
tenantId	string	tenantId is the tenant ID of the azure active directory application that is being used to authenticate.

11.1.221. .spec.remoteWrite[].basicAuth**Description**

BasicAuth configuration for the URL.
Cannot be set at the same time as **sigv4**, **authorization**, **oauth2**, or **azureAd**.

Type**object**

Property	Type	Description
password	object	password specifies a key of a Secret containing the password for authentication.
username	object	username specifies a key of a Secret containing the username for authentication.

11.1.222. .spec.remoteWrite[].basicAuth.password**Description**

password specifies a key of a Secret containing the password for authentication.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.223. .spec.remoteWrite[].basicAuth.username

Description

username specifies a key of a Secret containing the username for authentication.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.224. .spec.remoteWrite[].metadataConfig

Description

MetadataConfig configures the sending of series metadata to the remote storage.

Type

object

Property	Type	Description
maxSamplesPerSend	integer	MaxSamplesPerSend is the maximum number of metadata samples per send. It requires Prometheus >= v2.29.0.
send	boolean	Defines whether metric metadata is sent to the remote storage or not.
sendInterval	string	Defines how frequently metric metadata is sent to the remote storage.

11.1.225. .spec.remoteWrite[].oauth2

Description

OAuth2 configuration for the URL.

It requires Prometheus >= v2.27.0 or Thanos >= v0.24.0.

Cannot be set at the same time as **sigv4**, **authorization**, **basicAuth**, or **azureAd**.

Type

object

Required

- **clientId**
- **clientSecret**
- **tokenUrl**

Property	Type	Description
clientId	object	clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Property	Type	Description
clientSecret	object	clientSecret specifies a key of a Secret containing the OAuth2 client's secret.
endpointParams	object (string)	endpointParams configures the HTTP parameters to append to the token URL.
noProxy	string	noProxy is a comma-separated string that can contain IPs, CIDR notation, domain names that should be excluded from proxying. IP and domain names can contain port numbers. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader	object	ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyConnectHeader{}	array	
proxyConnectHeader{}[]	object	SecretKeySelector selects a key of a Secret.
proxyFromEnvironment	boolean	Whether to use the proxy configuration defined by environment variables (HTTP_PROXY, HTTPS_PROXY, and NO_PROXY). It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.
proxyUrl	string	proxyURL defines the HTTP proxy server to use.

Property	Type	Description
scopes	array (string)	scopes defines the OAuth2 scopes used for the token request.
tlsConfig	object	TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.
tokenUrl	string	tokenURL configures the URL to fetch the token from.

11.1.226. .spec.remoteWrite[].oauth2.clientId

Description

clientId specifies a key of a Secret or ConfigMap containing the OAuth2 client's ID.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

11.1.227. .spec.remoteWrite[].oauth2.clientId.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

11.1.228. .spec.remoteWrite[].oauth2.clientId.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.229. .spec.remoteWrite[].oauth2.clientSecret

Description

clientSecret specifies a key of a Secret containing the OAuth2 client's secret.

Type

object**Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.230. .spec.remoteWrite[].oauth2.proxyConnectHeader**Description**

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type**object****11.1.231. .spec.remoteWrite[].oauth2.proxyConnectHeader{}****Description****Type****array****11.1.232. .spec.remoteWrite[].oauth2.proxyConnectHeader{[]}[]****Description**

SecretKeySelector selects a key of a Secret.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.233. .spec.remoteWrite[].oauth2.tlsConfig

Description

TLS configuration to use when connecting to the OAuth2 server. It requires Prometheus >= v2.43.0.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
cert	object	Client certificate to present when doing client-authentication.
insecureSkipVerify	boolean	Disable target certificate validation.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.

Property	Type	Description
serverName	string	Used to verify the hostname for the targets.

11.1.234. .spec.remoteWrite[].oauth2.tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

11.1.235. .spec.remoteWrite[].oauth2.tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

11.1.236. .spec.remoteWrite[].oauth2.tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.237. .spec.remoteWrite[].oauth2.tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

11.1.238. .spec.remoteWrite[].oauth2.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

11.1.239. .spec.remoteWrite[].oauth2.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Property	Type	Description
optional	boolean	Specify whether the Secret or its key must be defined

11.1.240. .spec.remoteWrite[].oauth2.tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.241. .spec.remoteWrite[].proxyConnectHeader

Description

ProxyConnectHeader optionally specifies headers to send to proxies during CONNECT requests. It requires Prometheus >= v2.43.0, Alertmanager >= v0.25.0 or Thanos >= v0.32.0.

Type

object

11.1.242. .spec.remoteWrite[].proxyConnectHeader{}

Description

Type

array**11.1.243. .spec.remoteWrite[].proxyConnectHeader{}}[]****Description**

SecretKeySelector selects a key of a Secret.

Type**object****Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.244. .spec.remoteWrite[].queueConfig**Description**

QueueConfig allows tuning of the remote write queue parameters.

Type**object**

Property	Type	Description
batchSendDeadline	string	BatchSendDeadline is the maximum time a sample will wait in buffer.
capacity	integer	Capacity is the number of samples to buffer per shard before we start dropping them.

Property	Type	Description
maxBackoff	string	MaxBackoff is the maximum retry delay.
maxRetries	integer	MaxRetries is the maximum number of times to retry a batch on recoverable errors.
maxSamplesPerSend	integer	MaxSamplesPerSend is the maximum number of samples per send.
maxShards	integer	MaxShards is the maximum number of shards, i.e. amount of concurrency.
minBackoff	string	MinBackoff is the initial retry delay. Gets doubled for every retry.
minShards	integer	MinShards is the minimum number of shards, i.e. amount of concurrency.
retryOnRateLimit	boolean	Retry upon receiving a 429 status code from the remote-write storage. This is an experimental feature, it may change in any upcoming release in a breaking way.
sampleAgeLimit	string	SampleAgeLimit drops samples older than the limit. It requires Prometheus >= v2.50.0 or Thanos >= v0.32.0.

11.1.245. .spec.remoteWrite[].sigv4

Description

Sigv4 allows to configure AWS's Signature Verification 4 for the URL. It requires Prometheus >= v2.26.0 or Thanos >= v0.24.0.

Cannot be set at the same time as **authorization**, **basicAuth**, **oauth2**, or **azureAd**.

Type

object

Property	Type	Description
accessKey	object	AccessKey is the AWS API key. If not specified, the environment variable AWS_ACCESS_KEY_ID is used.
profile	string	Profile is the named AWS profile used to authenticate.
region	string	Region is the AWS region. If blank, the region from the default credentials chain used.
roleArn	string	RoleArn is the named AWS profile used to authenticate.
secretKey	object	SecretKey is the AWS API secret. If not specified, the environment variable AWS_SECRET_ACCESS_KEY is used.

11.1.246. .spec.remoteWrite[].sigv4.accessKey

Description

AccessKey is the AWS API key. If not specified, the environment variable **AWS_ACCESS_KEY_ID** is used.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.247. .spec.remoteWrite[].sigv4.secretKey

Description

SecretKey is the AWS API secret. If not specified, the environment variable **AWS_SECRET_ACCESS_KEY** is used.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.248. .spec.remoteWrite[].tlsConfig

Description

TLS Config to use for the URL.

Type

object

Property	Type	Description
ca	object	Certificate authority used when verifying server certificates.
caFile	string	Path to the CA cert in the Prometheus container to use for the targets.
cert	object	Client certificate to present when doing client-authentication.
certFile	string	Path to the client cert file in the Prometheus container for the targets.
insecureSkipVerify	boolean	Disable target certificate validation.
keyFile	string	Path to the client key file in the Prometheus container for the targets.
keySecret	object	Secret containing the client key file for the targets.
maxVersion	string	Maximum acceptable TLS version. It requires Prometheus >= v2.41.0 or Thanos >= v0.31.0.
minVersion	string	Minimum acceptable TLS version. It requires Prometheus >= v2.35.0 or Thanos >= v0.28.0.
serverName	string	Used to verify the hostname for the targets.

11.1.249. .spec.remoteWrite[].tlsConfig.ca

Description

Certificate authority used when verifying server certificates.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

11.1.250. .spec.remoteWrite[].tlsConfig.ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

11.1.251. .spec.remoteWrite[].tlsConfig.ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.252. .spec.remoteWrite[].tlsConfig.cert

Description

Client certificate to present when doing client-authentication.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

11.1.253. .spec.remoteWrite[].tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

11.1.254. .spec.remoteWrite[].tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.255. .spec.remoteWrite[].tlsConfig.keySecret

Description

Secret containing the client key file for the targets.

Type

object**Required**

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.256. .spec.remoteWrite[].writeRelabelConfigs**Description**

The list of remote write relabel configurations.

Type

array

11.1.257. .spec.remoteWrite[].writeRelabelConfigs[]**Description**

RelabelConfig allows dynamic rewriting of the label set for targets, alerts, scraped samples and remote write samples.

More info:

https://prometheus.io/docs/prometheus/latest/configuration/configuration/#relabel_config

Type

object

Property	Type	Description

Property	Type	Description
action	string	Action to perform based on the regex matching. Uppercase and Lowercase actions require Prometheus >= v2.36.0. DropEqual and KeepEqual actions require Prometheus >= v2.41.0. Default: "Replace"
modulus	integer	Modulus to take of the hash of the source label values. Only applicable when the action is HashMod.
regex	string	Regular expression against which the extracted value is matched.
replacement	string	Replacement value against which a Replace action is performed if the regular expression matches. Regex capture groups are available.
separator	string	Separator is the string between concatenated SourceLabels.
sourceLabels	array (string)	The source labels select values from existing labels. Their content is concatenated using the configured Separator and matched against the configured regular expression.
targetLabel	string	Label to which the resulting string is written in a replacement. It is mandatory for Replace, HashMod, Lowercase, Uppercase, KeepEqual and DropEqual actions. Regex capture groups are available.

Description

Resources defines the resource requirements for single Pods. If not provided, no requests/limits will be set

Type

object

Property	Type	Description
claims	array	Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate. This field is immutable. It can only be set for containers.
claims[]	object	ResourceClaim references one entry in PodSpec.ResourceClaims.
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

11.1.259. .spec.resources.claims**Description**

Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This is an alpha field and requires enabling the DynamicResourceAllocation feature gate.

This field is immutable. It can only be set for containers.

Type**array****11.1.260. .spec.resources.claims[]****Description**

ResourceClaim references one entry in PodSpec.ResourceClaims.

Type**object****Required**

- **name**

Property	Type	Description
name	string	Name must match the name of one entry in pod.spec.resourceClaims of the Pod where this field is used. It makes that resource available inside a container.
request	string	Request is the name chosen for a request in the referenced claim. If empty, everything from the claim is made available, otherwise only the result of this request.

11.1.261. .spec.ruleNamespaceSelector**Description**

Namespaces to be selected for Rules discovery. If unspecified, only the same namespace as the ThanosRuler object is in is used.

Type**object**

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Property	Type	Description
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

11.1.262. .spec.ruleNamespaceSelector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

11.1.263. .spec.ruleNamespaceSelector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

11.1.264. .spec.ruleSelector

Description

PrometheusRule objects to be selected for rule evaluation. An empty label selector matches all objects. A null label selector matches no objects.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

11.1.265. .spec.ruleSelector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

11.1.266. .spec.ruleSelector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

11.1.267. .spec.securityContext

Description

SecurityContext holds pod-level security attributes and common container settings. This defaults to the default PodSecurityContext.

Type

object

Property	Type	Description
appArmorProfile	object	appArmorProfile is the AppArmor options to use by the containers in this pod. Note that this field cannot be set when spec.os.name is windows.

Property	Type	Description
fsGroup	integer	A special supplemental group that applies to all containers in a pod. Some volume types allow the Kubelet to change the ownership of that volume to be owned by the pod: 1. The owning GID will be the FSGroup 2. The setgid bit is set (new files created in the volume will be owned by FSGroup) 3. The permission bits are OR'd with rw-rw---- If unset, the Kubelet will not modify the ownership and permissions of any volume. Note that this field cannot be set when spec.os.name is windows.
fsGroupChangePolicy	string	fsGroupChangePolicy defines behavior of changing ownership and permission of the volume before being exposed inside Pod. This field will only apply to volume types which support fsGroup based ownership (and permissions). It will have no effect on ephemeral volume types such as: secret, configmaps and emptydir. Valid values are "OnRootMismatch" and "Always". If not specified, "Always" is used. Note that this field cannot be set when spec.os.name is windows.
runAsGroup	integer	The GID to run the entrypoint of the container process. Uses runtime default if unset. May also be set in SecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence for that container. Note that this field cannot be set when spec.os.name is windows.

Property	Type	Description
runAsNonRoot	boolean	Indicates that the container must run as a non-root user. If true, the Kubelet will validate the image at runtime to ensure that it does not run as UID 0 (root) and fail to start the container if it does. If unset or false, no such validation will be performed. May also be set in SecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.
runAsUser	integer	The UID to run the entrypoint of the container process. Defaults to user specified in image metadata if unspecified. May also be set in SecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence for that container. Note that this field cannot be set when spec.os.name is windows.
seLinuxChangePolicy	string	seLinuxChangePolicy defines how the container's SELinux label is applied to all volumes used by the Pod. It has no effect on nodes that do not support SELinux or to volumes does not support SELinux. Valid values are "MountOption" and "Recursive". "Recursive" means relabeling of all files on all Pod volumes by the container runtime. This may be slow for large volumes, but allows mixing privileged and unprivileged Pods sharing the same volume on the same node. "MountOption" mounts all eligible Pod volumes with -o context mount option. This requires all Pods that share the same volume to use the same SELinux label. It is not possible to share the same volume among privileged and unprivileged Pods. Eligible volumes are in-tree FibreChannel

Property	Type	Description
		and iSCSI volumes, and all CSI volumes whose CSI driver announces SELinux support by setting <code>spec.seLinuxMount: true</code> in their CSIDriver instance. Other volumes are always re-labelled recursively. "MountOption" value is allowed only when SELinuxMount feature gate is enabled. If not specified and SELinuxMount feature gate is enabled, "MountOption" is used. If not specified and SELinuxMount feature gate is disabled, "MountOption" is used for ReadWriteOncePod volumes and "Recursive" for all other volumes. This field affects only Pods that have SELinux label set, either in PodSecurityContext or in SecurityContext of all containers. All Pods that use the same volume should use the same <code>seLinuxChangePolicy</code>, otherwise some pods can get stuck in ContainerCreating state. Note that this field cannot be set when <code>spec.os.name</code> is windows.
seLinuxOptions	object	The SELinux context to be applied to all containers. If unspecified, the container runtime will allocate a random SELinux context for each container. May also be set in SecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence for that container. Note that this field cannot be set when <code>spec.os.name</code> is windows.
seccompProfile	object	The seccomp options to use by the containers in this pod. Note that this field cannot be set when <code>spec.os.name</code> is windows.

Property	Type	Description
supplementalGroups	array (integer)	A list of groups applied to the first process run in each container, in addition to the container's primary GID and fsGroup (if specified). If the SupplementalGroupsPolicy feature is enabled, the supplementalGroupsPolicy field determines whether these are in addition to or instead of any group memberships defined in the container image. If unspecified, no additional groups are added, though group memberships defined in the container image may still be used, depending on the supplementalGroupsPolicy field. Note that this field cannot be set when spec.os.name is windows.
supplementalGroupsPolicy	string	Defines how supplemental groups of the first container processes are calculated. Valid values are "Merge" and "Strict". If not specified, "Merge" is used. (Alpha) Using the field requires the SupplementalGroupsPolicy feature gate to be enabled and the container runtime must implement support for this feature. Note that this field cannot be set when spec.os.name is windows.
sysctls	array	Sysctls hold a list of namespaced sysctls used for the pod. Pods with unsupported sysctls (by the container runtime) might fail to launch. Note that this field cannot be set when spec.os.name is windows.
sysctls[]	object	Sysctl defines a kernel parameter to be set

Property	Type	Description
windowsOptions	object	The Windows specific settings applied to all containers. If unspecified, the options within a container's SecurityContext will be used. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is linux.

11.1.268. .spec.securityContext.appArmorProfile

Description

appArmorProfile is the AppArmor options to use by the containers in this pod. Note that this field cannot be set when spec.os.name is windows.

Type

object

Required

- **type**

Property	Type	Description
localhostProfile	string	localhostProfile indicates a profile loaded on the node that should be used. The profile must be preconfigured on the node to work. Must match the loaded name of the profile. Must be set if and only if type is "Localhost".
type	string	type indicates which kind of AppArmor profile will be applied. Valid options are: Localhost - a profile pre-loaded on the node. RuntimeDefault - the container runtime's default profile. Unconfined - no AppArmor enforcement.

11.1.269. .spec.securityContext.seLinuxOptions

Description

The SELinux context to be applied to all containers. If unspecified, the container runtime will allocate a random SELinux context for each container. May also be set in SecurityContext. If set in both

SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence for that container. Note that this field cannot be set when spec.os.name is windows.

Type

object

Property	Type	Description
level	string	Level is SELinux level label that applies to the container.
role	string	Role is a SELinux role label that applies to the container.
type	string	Type is a SELinux type label that applies to the container.
user	string	User is a SELinux user label that applies to the container.

11.1.270. .spec.securityContext.seccompProfile

Description

The seccomp options to use by the containers in this pod. Note that this field cannot be set when spec.os.name is windows.

Type

object

Required

- **type**

Property	Type	Description
localhostProfile	string	localhostProfile indicates a profile defined in a file on the node should be used. The profile must be preconfigured on the node to work. Must be a descending path, relative to the kubelet's configured seccomp profile location. Must be set if type is "Localhost". Must NOT be set for any other type.

Property	Type	Description
type	string	type indicates which kind of seccomp profile will be applied. Valid options are: Localhost - a profile defined in a file on the node should be used. RuntimeDefault - the container runtime default profile should be used. Unconfined - no profile should be applied.

11.1.271. .spec.securityContext.sysctls

Description

Sysctls hold a list of namespaced sysctls used for the pod. Pods with unsupported sysctls (by the container runtime) might fail to launch. Note that this field cannot be set when spec.os.name is windows.

Type

array

11.1.272. .spec.securityContext.sysctls[]

Description

Sysctl defines a kernel parameter to be set

Type

object

Required

- **name**
- **value**

Property	Type	Description
name	string	Name of a property to set
value	string	Value of a property to set

11.1.273. .spec.securityContext.windowsOptions

Description

The Windows specific settings applied to all containers. If unspecified, the options within a container's SecurityContext will be used. If set in both SecurityContext and PodSecurityContext, the value

specified in SecurityContext takes precedence. Note that this field cannot be set when spec.os.name is linux.

Type

object

Property	Type	Description
gmsaCredentialSpec	string	GMSACredentialSpec is where the GMSA admission webhook (https://github.com/kubernetes-sigs/windows-gmsa) inlines the contents of the GMSA credential spec named by the GMSACredentialSpecName field.
gmsaCredentialSpecName	string	GMSACredentialSpecName is the name of the GMSA credential spec to use.
hostProcess	boolean	HostProcess determines if a container should be run as a 'Host Process' container. All of a Pod's containers must have the same effective HostProcess value (it is not allowed to have a mix of HostProcess containers and non-HostProcess containers). In addition, if HostProcess is true then HostNetwork must also be set to true.
runAsUserName	string	The UserName in Windows to run the entrypoint of the container process. Defaults to the user specified in image metadata if unspecified. May also be set in PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.

11.1.274. .spec.storage

Description

Storage spec to specify how storage shall be used.

Type

object

Property	Type	Description
disableMountSubPath	boolean	Deprecated: subPath usage will be removed in a future release.
emptyDir	object	EmptyDirVolumeSource to be used by the StatefulSet. If specified, it takes precedence over ephemeral and volumeClaimTemplate . More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir
ephemeral	object	EphemeralVolumeSource to be used by the StatefulSet. This is a beta field in k8s 1.21 and GA in 1.15. For lower versions, starting with k8s 1.19, it requires enabling the GenericEphemeralVolume feature gate. More info: https://kubernetes.io/docs/concepts/storage/ephemeral-volumes/#generic-ephemeral-volumes
volumeClaimTemplate	object	Defines the PVC spec to be used by the Prometheus StatefulSets. The easiest way to use a volume that cannot be automatically provisioned is to use a label selector alongside manually created PersistentVolumes.

11.1.275. .spec.storage.emptyDir

Description

EmptyDirVolumeSource to be used by the StatefulSet. If specified, it takes precedence over **ephemeral** and **volumeClaimTemplate**. More info:

<https://kubernetes.io/docs/concepts/storage/volumes/#emptydir>

Type

object

Property	Type	Description

Property	Type	Description
medium	string	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	integer-or-string	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir

11.1.276. .spec.storage.ephemeral

Description

EphemeralVolumeSource to be used by the StatefulSet. This is a beta field in k8s 1.21 and GA in 1.15. For lower versions, starting with k8s 1.19, it requires enabling the GenericEphemeralVolume feature gate. More info: <https://kubernetes.io/docs/concepts/storage/ephemeral-volumes/#generic-ephemeral-volumes>

Type

object

Property	Type	Description

Property	Type	Description
volumeClaimTemplate	object	Will be used to create a stand-alone PVC to provision the volume. The pod in which this EphemeralVolumeSource is embedded will be the owner of the PVC, i.e. the PVC will be deleted together with the pod. The name of the PVC will be <pod name>-<volume name> where <volume name> is the name from the PodSpec.Volumes array entry. Pod validation will reject the pod if the concatenated name is not valid for a PVC (for example, too long). An existing PVC with that name that is not owned by the pod will not be used for the pod to avoid using an unrelated volume by mistake. Starting the pod is then blocked until the unrelated PVC is removed. If such a pre-created PVC is meant to be used by the pod, the PVC has to updated with an owner reference to the pod once the pod exists. Normally this should not be necessary, but it may be useful when manually reconstructing a broken cluster. This field is read-only and no changes will be made by Kubernetes to the PVC after it has been created. Required, must not be nil.

11.1.277. .spec.storage.ephemeral.volumeClaimTemplate

Description

Will be used to create a stand-alone PVC to provision the volume. The pod in which this EphemeralVolumeSource is embedded will be the owner of the PVC, i.e. the PVC will be deleted together with the pod. The name of the PVC will be **<pod name>-<volume name>** where **<volume name>** is the name from the **PodSpec.Volumes** array entry. Pod validation will reject the pod if the concatenated name is not valid for a PVC (for example, too long).

An existing PVC with that name that is not owned by the pod will **not** be used for the pod to avoid using an unrelated volume by mistake. Starting the pod is then blocked until the unrelated PVC is removed. If such a pre-created PVC is meant to be used by the pod, the PVC has to updated with an

owner reference to the pod once the pod exists. Normally this should not be necessary, but it may be useful when manually reconstructing a broken cluster.

This field is read-only and no changes will be made by Kubernetes to the PVC after it has been created.

Required, must not be nil.

Type

object

Required

- **spec**

Property	Type	Description
metadata	object	May contain labels and annotations that will be copied into the PVC when creating it. No other fields are allowed and will be rejected during validation.
spec	object	The specification for the PersistentVolumeClaim. The entire content is copied unchanged into the PVC that gets created from this template. The same fields as in a PersistentVolumeClaim are also valid here.

11.1.278. .spec.storage.ephemeral.volumeClaimTemplate.metadata

Description

May contain labels and annotations that will be copied into the PVC when creating it. No other fields are allowed and will be rejected during validation.

Type

object

11.1.279. .spec.storage.ephemeral.volumeClaimTemplate.spec

Description

The specification for the PersistentVolumeClaim. The entire content is copied unchanged into the PVC that gets created from this template. The same fields as in a PersistentVolumeClaim are also valid here.

Type

object

Property	Type	Description
accessModes	array (string)	accessModes contains the desired access modes the volume should have. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#access-modes-1
dataSource	object	dataSource field can be used to specify either: * An existing VolumeSnapshot object (snapshot.storage.k8s.io/VolumeSnapshot) * An existing PVC (PersistentVolumeClaim) If the provisioner or an external controller can support the specified data source, it will create a new volume based on the contents of the specified data source. When the AnyVolumeDataSource feature gate is enabled, dataSource contents will be copied to dataSourceRef, and dataSourceRef contents will be copied to dataSource when dataSourceRef.namespace is not specified. If the namespace is specified, then dataSourceRef will not be copied to dataSource.

Property	Type	Description
dataSourceRef	object	dataSourceRef specifies the object from which to populate the volume with data, if a non-empty volume is desired. This may be any object from a non-empty API group (non core object) or a PersistentVolumeClaim object. When this field is specified, volume binding will only succeed if the type of the specified object matches some installed volume populator or dynamic provisioner. This field will replace the functionality of the dataSource field and as such if both fields are non-empty, they must have the same value. For backwards compatibility, when namespace isn't specified in dataSourceRef, both fields (dataSource and dataSourceRef) will be set to the same value automatically if one of them is empty and the other is non-empty. When namespace is specified in dataSourceRef, dataSource isn't set to the same value and must be empty. There are three important differences between dataSource and dataSourceRef: * While dataSource only allows two specific types of objects, dataSourceRef allows any non-core object, as well as PersistentVolumeClaim objects. * While dataSource ignores disallowed values (dropping them), dataSourceRef preserves all values, and generates an error if a disallowed value is specified. * While dataSource only allows local objects, dataSourceRef allows objects in any namespaces. (Beta) Using this field requires the AnyVolumeDataSource feature gate to be enabled. (Alpha) Using the namespace field of dataSourceRef requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

Property	Type	Description
resources	object	resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources
selector	object	selector is a label query over volumes to consider for binding.
storageClassName	string	storageClassName is the name of the StorageClass required by the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#class-1

Property	Type	Description
volumeAttributesClassName	string	volumeAttributesClassName may be used to set the VolumeAttributesClass used by this claim. If specified, the CSI driver will create or update the volume with the attributes defined in the corresponding VolumeAttributesClass. This has a different purpose than storageClassName, it can be changed after the claim is created. An empty string value means that no VolumeAttributesClass will be applied to the claim but it's not allowed to reset this field to empty string once it is set. If unspecified and the PersistentVolumeClaim is unbound, the default VolumeAttributesClass will be set by the persistentvolume controller if it exists. If the resource referred to by volumeAttributesClass does not exist, this PersistentVolumeClaim will be set to a Pending state, as reflected by the modifyVolumeStatus field, until such as a resource exists. More info: https://kubernetes.io/docs/concepts/storage/volume-attributes-classes/ (Beta) Using this field requires the VolumeAttributesClass feature gate to be enabled (off by default).
volumeMode	string	volumeMode defines what type of volume is required by the claim. Value of Filesystem is implied when not included in claim spec.
volumeName	string	volumeName is the binding reference to the PersistentVolume backing this claim.

11.1.280. .spec.storage.ephemeral.volumeClaimTemplate.spec.dataSource

Description

dataSource field can be used to specify either: * An existing VolumeSnapshot object (snapshot.storage.k8s.io/VolumeSnapshot) * An existing PVC (PersistentVolumeClaim) If the provisioner or an external controller can support the specified data source, it will create a new volume based on the contents of the specified data source. When the AnyVolumeDataSource feature gate is enabled, dataSource contents will be copied to dataSourceRef, and dataSourceRef contents will be copied to dataSource when dataSourceRef.namespace is not specified. If the namespace is specified, then dataSourceRef will not be copied to dataSource.

Type

object

Required

- **kind**
- **name**

Property	Type	Description
apiGroup	string	APIGroup is the group for the resource being referenced. If APIGroup is not specified, the specified Kind must be in the core API group. For any other third-party types, APIGroup is required.
kind	string	Kind is the type of resource being referenced
name	string	Name is the name of resource being referenced

11.1.281. .spec.storage.ephemeral.volumeClaimTemplate.spec.dataSourceRef

Description

dataSourceRef specifies the object from which to populate the volume with data, if a non-empty volume is desired. This may be any object from a non-empty API group (non core object) or a PersistentVolumeClaim object. When this field is specified, volume binding will only succeed if the type of the specified object matches some installed volume populator or dynamic provisioner. This field will replace the functionality of the dataSource field and as such if both fields are non-empty, they must have the same value. For backwards compatibility, when namespace isn't specified in dataSourceRef, both fields (dataSource and dataSourceRef) will be set to the same value automatically if one of them is empty and the other is non-empty. When namespace is specified in dataSourceRef, dataSource isn't set to the same value and must be empty. There are three important differences between dataSource and dataSourceRef: * While dataSource only allows two specific types of objects, dataSourceRef allows any non-core object, as well as PersistentVolumeClaim objects. * While dataSource ignores disallowed values (dropping them), dataSourceRef preserves all values, and generates an error if a disallowed value is specified. * While dataSource only allows local objects, dataSourceRef allows objects in any namespaces. (Beta) Using this field requires the AnyVolumeDataSource feature gate to be enabled. (Alpha) Using the namespace field of dataSourceRef requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

Type**object****Required**

- **kind**
- **name**

Property	Type	Description
apiGroup	string	APIGroup is the group for the resource being referenced. If APIGroup is not specified, the specified Kind must be in the core API group. For any other third-party types, APIGroup is required.
kind	string	Kind is the type of resource being referenced
name	string	Name is the name of resource being referenced
namespace	string	Namespace is the namespace of resource being referenced Note that when a namespace is specified, a gateway.networking.k8s.io/ReferenceGrant object is required in the referent namespace to allow that namespace's owner to accept the reference. See the ReferenceGrant documentation for details. (Alpha) This field requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

11.1.282. .spec.storage.ephemeral.volumeClaimTemplate.spec.resources**Description**

resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: <https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources>

Type**object**

Property	Type	Description
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

11.1.283. .spec.storage.ephemeral.volumeClaimTemplate.spec.selector

Description

selector is a label query over volumes to consider for binding.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

11.1.284. .spec.storage.ephemeral.volumeClaimTemplate.spec.selector.matchExpressio

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

11.1.285. .spec.storage.ephemeral.volumeClaimTemplate.spec.selector.matchExpressic**Description**

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

11.1.286. .spec.storage.volumeClaimTemplate**Description**

Defines the PVC spec to be used by the Prometheus StatefulSets. The easiest way to use a volume that cannot be automatically provisioned is to use a label selector alongside manually created PersistentVolumes.

Type

object

Property	Type	Description
apiVersion	string	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	string	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	object	EmbeddedMetadata contains metadata relevant to an EmbeddedResource.
spec	object	Defines the desired characteristics of a volume requested by a pod author. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
status	object	Deprecated: this field is never set.

11.1.287. .spec.storage.volumeClaimTemplate.metadata

Description

EmbeddedMetadata contains metadata relevant to an EmbeddedResource.

Type

object

Property	Type	Description

Property	Type	Description
annotations	object (string)	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations/
labels	object (string)	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/
name	string	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/

11.1.288. .spec.storage.volumeClaimTemplate.spec

Description

Defines the desired characteristics of a volume requested by a pod author. More info: <https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims>

Type

object

Property	Type	Description

Property	Type	Description
accessModes	array (string)	accessModes contains the desired access modes the volume should have. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#access-modes-1
dataSource	object	dataSource field can be used to specify either: * An existing VolumeSnapshot object (snapshot.storage.k8s.io/VolumeSnapshot) * An existing PVC (PersistentVolumeClaim) If the provisioner or an external controller can support the specified data source, it will create a new volume based on the contents of the specified data source. When the AnyVolumeDataSource feature gate is enabled, dataSource contents will be copied to dataSourceRef, and dataSourceRef contents will be copied to dataSource when dataSourceRef.namespace is not specified. If the namespace is specified, then dataSourceRef will not be copied to dataSource.

Property	Type	Description
dataSourceRef	object	dataSourceRef specifies the object from which to populate the volume with data, if a non-empty volume is desired. This may be any object from a non-empty API group (non core object) or a PersistentVolumeClaim object. When this field is specified, volume binding will only succeed if the type of the specified object matches some installed volume populator or dynamic provisioner. This field will replace the functionality of the dataSource field and as such if both fields are non-empty, they must have the same value. For backwards compatibility, when namespace isn't specified in dataSourceRef, both fields (dataSource and dataSourceRef) will be set to the same value automatically if one of them is empty and the other is non-empty. When namespace is specified in dataSourceRef, dataSource isn't set to the same value and must be empty. There are three important differences between dataSource and dataSourceRef: * - While dataSource only allows two specific types of objects, dataSourceRef allows any non-core object, as well as PersistentVolumeClaim objects. * - While dataSource ignores disallowed values (dropping them), dataSourceRef preserves all values, and generates an error if a disallowed value is specified. * - While dataSource only allows local objects, dataSourceRef allows objects in any namespaces. (Beta) Using this field requires the AnyVolumeDataSource feature gate to be enabled. (Alpha) Using the namespace field of dataSourceRef requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

Property	Type	Description
resources	object	resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources
selector	object	selector is a label query over volumes to consider for binding.
storageClassName	string	storageClassName is the name of the StorageClass required by the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#class-1

Property	Type	Description
volumeAttributesClassName	string	volumeAttributesClassName may be used to set the VolumeAttributesClass used by this claim. If specified, the CSI driver will create or update the volume with the attributes defined in the corresponding VolumeAttributesClass. This has a different purpose than storageClassName, it can be changed after the claim is created. An empty string value means that no VolumeAttributesClass will be applied to the claim but it's not allowed to reset this field to empty string once it is set. If unspecified and the PersistentVolumeClaim is unbound, the default VolumeAttributesClass will be set by the persistentvolume controller if it exists. If the resource referred to by volumeAttributesClass does not exist, this PersistentVolumeClaim will be set to a Pending state, as reflected by the modifyVolumeStatus field, until such as a resource exists. More info: https://kubernetes.io/docs/concepts/storage/volume-attributes-classes/ (Beta) Using this field requires the VolumeAttributesClass feature gate to be enabled (off by default).
volumeMode	string	volumeMode defines what type of volume is required by the claim. Value of Filesystem is implied when not included in claim spec.
volumeName	string	volumeName is the binding reference to the PersistentVolume backing this claim.

11.1.289. .spec.storage.volumeClaimTemplate.spec.dataSource

Description

dataSource field can be used to specify either: * An existing VolumeSnapshot object (snapshot.storage.k8s.io/VolumeSnapshot) * An existing PVC (PersistentVolumeClaim) If the provisioner or an external controller can support the specified data source, it will create a new volume based on the contents of the specified data source. When the AnyVolumeDataSource feature gate is enabled, dataSource contents will be copied to dataSourceRef, and dataSourceRef contents will be copied to dataSource when dataSourceRef.namespace is not specified. If the namespace is specified, then dataSourceRef will not be copied to dataSource.

Type

object

Required

- **kind**
- **name**

Property	Type	Description
apiGroup	string	APIGroup is the group for the resource being referenced. If APIGroup is not specified, the specified Kind must be in the core API group. For any other third-party types, APIGroup is required.
kind	string	Kind is the type of resource being referenced
name	string	Name is the name of resource being referenced

11.1.290. .spec.storage.volumeClaimTemplate.spec.dataSourceRef

Description

dataSourceRef specifies the object from which to populate the volume with data, if a non-empty volume is desired. This may be any object from a non-empty API group (non core object) or a PersistentVolumeClaim object. When this field is specified, volume binding will only succeed if the type of the specified object matches some installed volume populator or dynamic provisioner. This field will replace the functionality of the dataSource field and as such if both fields are non-empty, they must have the same value. For backwards compatibility, when namespace isn't specified in dataSourceRef, both fields (dataSource and dataSourceRef) will be set to the same value automatically if one of them is empty and the other is non-empty. When namespace is specified in dataSourceRef, dataSource isn't set to the same value and must be empty. There are three important differences between dataSource and dataSourceRef: * While dataSource only allows two specific types of objects, dataSourceRef allows any non-core object, as well as PersistentVolumeClaim objects. * While dataSource ignores disallowed values (dropping them), dataSourceRef preserves all values, and generates an error if a disallowed value is specified. * While dataSource only allows local objects, dataSourceRef allows objects in any namespaces. (Beta) Using this field requires the AnyVolumeDataSource feature gate to be enabled. (Alpha) Using the namespace field of dataSourceRef requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

Type**object****Required**

- **kind**
- **name**

Property	Type	Description
apiGroup	string	APIGroup is the group for the resource being referenced. If APIGroup is not specified, the specified Kind must be in the core API group. For any other third-party types, APIGroup is required.
kind	string	Kind is the type of resource being referenced
name	string	Name is the name of resource being referenced
namespace	string	Namespace is the namespace of resource being referenced Note that when a namespace is specified, a gateway.networking.k8s.io/ReferenceGrant object is required in the referent namespace to allow that namespace's owner to accept the reference. See the ReferenceGrant documentation for details. (Alpha) This field requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

11.1.291. .spec.storage.volumeClaimTemplate.spec.resources**Description**

resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: <https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources>

Type**object**

Property	Type	Description
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

11.1.292. .spec.storage.volumeClaimTemplate.spec.selector

Description

selector is a label query over volumes to consider for binding.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

11.1.293. .spec.storage.volumeClaimTemplate.spec.selector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

11.1.294. .spec.storage.volumeClaimTemplate.spec.selector.matchExpressions[]**Description**

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

11.1.295. .spec.storage.volumeClaimTemplate.status**Description**

Deprecated: this field is never set.

Type

object

Property	Type	Description

Property	Type	Description
accessModes	array (string)	accessModes contains the actual access modes the volume backing the PVC has. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#access-modes-1
allocatedResourceStatuses	object (string)	allocatedResourceStatuses stores status of resource being resized for the given PVC. Key names follow standard Kubernetes label syntax. Valid values are either: * Un-prefixed keys: - storage - the capacity of the volume. * Custom resources must use implementation-defined prefixed names such as "example.com/my-custom-resource" Apart from above values - keys that are unprefixed or have kubernetes.io prefix are considered reserved and hence may not be used. ClaimResourceStatus can be in any of following states: - ControllerResizeInProgress: State set when resize controller starts resizing the volume in control-plane. - ControllerResizeFailed: State set when resize has failed in resize controller with a terminal error. - NodeResizePending: State set when resize controller has finished resizing the volume but further resizing of volume is needed on the node. - NodeResizeInProgress: State set when kubelet starts resizing the volume. - NodeResizeFailed: State set when resizing has failed in kubelet with a terminal error. Transient errors don't set NodeResizeFailed. For example: if expanding a PVC for more capacity - this field can be one of the following states: - pvc.status.allocatedResourceStatus['storage'] = "ControllerResizeInProgress" - pvc.status.allocatedResourceStatus['storage'] =

Property	Type	Description
		"ControllerResizeFailed" - pvc.status.allocatedResourceStatus['storage'] = "NodeResizePending" - pvc.status.allocatedResourceStatus['storage'] = "NodeResizeInProgress" - pvc.status.allocatedResourceStatus['storage'] = "NodeResizeFailed" When this field is not set, it means that no resize operation is in progress for the given PVC. A controller that receives PVC update with previously unknown resourceName or ClaimResourceStatus should ignore the update for the purpose it was designed. For example - a controller that only is responsible for resizing capacity of the volume, should ignore PVC updates that change other valid resources associated with PVC. This is an alpha field and requires enabling RecoverVolumeExpansionFailure feature.

Property	Type	Description
allocatedResources	integer-or-string	allocatedResources tracks the resources allocated to a PVC including its capacity. Key names follow standard Kubernetes label syntax. Valid values are either: * Un-prefixed keys: - storage - the capacity of the volume. * Custom resources must use implementation-defined prefixed names such as "example.com/my-custom-resource" Apart from above values - keys that are unprefixed or have kubernetes.io prefix are considered reserved and hence may not be used. Capacity reported here may be larger than the actual capacity when a volume expansion operation is requested. For storage quota, the larger value from allocatedResources and PVC.spec.resources is used. If allocatedResources is not set, PVC.spec.resources alone is used for quota calculation. If a volume expansion capacity request is lowered, allocatedResources is only lowered if there are no expansion operations in progress and if the actual volume capacity is equal or lower than the requested capacity. A controller that receives PVC update with previously unknown resourceName should ignore the update for the purpose it was designed. For example - a controller that only is responsible for resizing capacity of the volume, should ignore PVC updates that change other valid resources associated with PVC. This is an alpha field and requires enabling RecoverVolumeExpansionFailure feature.
capacity	integer-or-string	capacity represents the actual resources of the underlying volume.

Property	Type	Description
conditions	array	conditions is the current Condition of persistent volume claim. If underlying persistent volume is being resized then the Condition will be set to 'Resizing'.
conditions[]	object	PersistentVolumeClaimCondition contains details about state of pvc
currentVolumeAttributesClassName	string	currentVolumeAttributesClassName is the current name of the VolumeAttributesClass the PVC is using. When unset, there is no VolumeAttributeClass applied to this PersistentVolumeClaim This is a beta field and requires enabling VolumeAttributesClass feature (off by default).
modifyVolumeStatus	object	ModifyVolumeStatus represents the status object of ControllerModifyVolume operation. When this is unset, there is no ModifyVolume operation being attempted. This is a beta field and requires enabling VolumeAttributesClass feature (off by default).
phase	string	phase represents the current phase of PersistentVolumeClaim.

11.1.296. .spec.storage.volumeClaimTemplate.status.conditions

Description

conditions is the current Condition of persistent volume claim. If underlying persistent volume is being resized then the Condition will be set to 'Resizing'.

Type

array

11.1.297. .spec.storage.volumeClaimTemplate.status.conditions[]

Description

PersistentVolumeClaimCondition contains details about state of pvc

Type

object

Required

- **status**
- **type**

Property	Type	Description
lastProbeTime	string	lastProbeTime is the time we probed the condition.
lastTransitionTime	string	lastTransitionTime is the time the condition transitioned from one status to another.
message	string	message is the human-readable message indicating details about last transition.
reason	string	reason is a unique, this should be a short, machine understandable string that gives the reason for condition's last transition. If it reports "Resizing" that means the underlying persistent volume is being resized.
status	string	Status is the status of the condition. Can be True, False, Unknown. More info: https://kubernetes.io/docs/reference/kubernetes-api/config-and-storage-resources/persistent-volume-claim-v1/#:~:text=state%20of%20pvc-,conditions.status,-(string)%2C%20required
type	string	Type is the type of the condition. More info: https://kubernetes.io/docs/reference/kubernetes-api/config-and-storage-resources/persistent-volume-claim-v1/#:~:text=set%20to%20%27ResizedStarted%27,-PersistentVolumeClaimCondition,-contains%20details%20about

11.1.298. .spec.storage.volumeClaimTemplate.status.modifyVolumeStatus

Description

ModifyVolumeStatus represents the status object of ControllerModifyVolume operation. When this is unset, there is no ModifyVolume operation being attempted. This is a beta field and requires enabling VolumeAttributesClass feature (off by default).

Type

object

Required

- **status**

Property	Type	Description
status	string	status is the status of the ControllerModifyVolume operation. It can be in any of following states: - Pending Pending indicates that the PersistentVolumeClaim cannot be modified due to unmet requirements, such as the specified VolumeAttributesClass not existing. - InProgress InProgress indicates that the volume is being modified. - Infeasible Infeasible indicates that the request has been rejected as invalid by the CSI driver. To resolve the error, a valid VolumeAttributesClass needs to be specified. Note: New statuses can be added in the future. Consumers should check for unknown statuses and fail appropriately.
targetVolumeAttributesClassName	string	targetVolumeAttributesClassName is the name of the VolumeAttributesClass the PVC currently being reconciled

11.1.299. .spec.tolerations

Description

If specified, the pod's tolerations.

Type

array

11.1.300. .spec.tolerations[]

Description

The pod this Toleration is attached to tolerates any taint that matches the triple <key,value,effect> using the matching operator <operator>.

Type

object

Property	Type	Description
effect	string	Effect indicates the taint effect to match. Empty means match all taint effects. When specified, allowed values are NoSchedule, PreferNoSchedule and NoExecute.
key	string	Key is the taint key that the toleration applies to. Empty means match all taint keys. If the key is empty, operator must be Exists; this combination means to match all values and all keys.
operator	string	Operator represents a key's relationship to the value. Valid operators are Exists and Equal. Defaults to Equal. Exists is equivalent to wildcard for value, so that a pod can tolerate all taints of a particular category.
tolerationSeconds	integer	TolerationSeconds represents the period of time the toleration (which must be of effect NoExecute, otherwise this field is ignored) tolerates the taint. By default, it is not set, which means tolerate the taint forever (do not evict). Zero and negative values will be treated as 0 (evict immediately) by the system.
value	string	Value is the taint value the toleration matches to. If the operator is Exists, the value should be empty, otherwise just a regular string.

11.1.301. .spec.topologySpreadConstraints

Description

If specified, the pod's topology spread constraints.

Type

array

11.1.302. .spec.topologySpreadConstraints[]

Description

TopologySpreadConstraint specifies how to spread matching pods among the given topology.

Type

object

Required

- **maxSkew**
- **topologyKey**
- **whenUnsatisfiable**

Property	Type	Description
labelSelector	object	LabelSelector is used to find matching pods. Pods that match this label selector are counted to determine the number of pods in their corresponding topology domain.
matchLabelKeys	array (string)	MatchLabelKeys is a set of pod label keys to select the pods over which spreading will be calculated. The keys are used to lookup values from the incoming pod labels, those key-value labels are ANDed with labelSelector to select the group of existing pods over which spreading will be calculated for the incoming pod. The same key is forbidden to exist in both MatchLabelKeys and LabelSelector. MatchLabelKeys cannot be set when LabelSelector isn't set. Keys that don't exist in the incoming pod labels will be ignored. A null or empty list means only match against labelSelector. This is a beta field and requires the <code>MatchLabelKeysInPodTopologySpread</code> feature gate to be enabled (enabled by default).

Property	Type	Description
maxSkew	integer	MaxSkew describes the degree to which pods may be unevenly distributed. When whenUnsatisfiable=DoNotSchedule, it is the maximum permitted difference between the number of matching pods in the target topology and the global minimum. The global minimum is the minimum number of matching pods in an eligible domain or zero if the number of eligible domains is less than MinDomains. For example, in a 3-zone cluster, MaxSkew is set to 1, and pods with the same labelSelector spread as 2/2/1: In this case, the global minimum is 1. zone1 zone2 zone3 P P P P P - if MaxSkew is 1, incoming pod can only be scheduled to zone3 to become 2/2/2; scheduling it onto zone1(zone2) would make the ActualSkew(3-1) on zone1(zone2) violate MaxSkew(1). - if MaxSkew is 2, incoming pod can be scheduled onto any zone. When whenUnsatisfiable=ScheduleAnyway, it is used to give higher precedence to topologies that satisfy it. It's a required field. Default value is 1 and 0 is not allowed.

Property	Type	Description
minDomains	integer	MinDomains indicates a minimum number of eligible domains. When the number of eligible domains with matching topology keys is less than minDomains, Pod Topology Spread treats "global minimum" as 0, and then the calculation of Skew is performed. And when the number of eligible domains with matching topology keys equals or greater than minDomains, this value has no effect on scheduling. As a result, when the number of eligible domains is less than minDomains, scheduler won't schedule more than maxSkew Pods to those domains. If value is nil, the constraint behaves as if MinDomains is equal to 1. Valid values are integers greater than 0. When value is not nil, WhenUnsatisfiable must be DoNotSchedule. For example, in a 3-zone cluster, MaxSkew is set to 2, MinDomains is set to 5 and pods with the same labelSelector spread as 2/2/2: zone1 zone2 zone3 P P P P P P The number of domains is less than 5(MinDomains), so "global minimum" is treated as 0. In this situation, new pod with the same labelSelector cannot be scheduled, because computed skew will be 3(3 - 0) if new Pod is scheduled to any of the three zones, it will violate MaxSkew.

Property	Type	Description
nodeAffinityPolicy	string	NodeAffinityPolicy indicates how we will treat Pod's nodeAffinity/nodeSelector when calculating pod topology spread skew. Options are: - Honor: only nodes matching nodeAffinity/nodeSelector are included in the calculations. - Ignore: nodeAffinity/nodeSelector are ignored. All nodes are included in the calculations. If this value is nil, the behavior is equivalent to the Honor policy.
nodeTaintsPolicy	string	NodeTaintsPolicy indicates how we will treat node taints when calculating pod topology spread skew. Options are: - Honor: nodes without taints, along with tainted nodes for which the incoming pod has a toleration, are included. - Ignore: node taints are ignored. All nodes are included. If this value is nil, the behavior is equivalent to the Ignore policy.
topologyKey	string	TopologyKey is the key of node labels. Nodes that have a label with this key and identical values are considered to be in the same topology. We consider each <key, value> as a "bucket", and try to put balanced number of pods into each bucket. We define a domain as a particular instance of a topology. Also, we define an eligible domain as a domain whose nodes meet the requirements of nodeAffinityPolicy and nodeTaintsPolicy. e.g. If TopologyKey is "kubernetes.io/hostname", each Node is a domain of that topology. And, if TopologyKey is "topology.kubernetes.io/zone", each zone is a domain of that topology. It's a required field.

Property	Type	Description
whenUnsatisfiable	string	WhenUnsatisfiable indicates how to deal with a pod if it doesn't satisfy the spread constraint. - DoNotSchedule (default) tells the scheduler not to schedule it. - ScheduleAnyway tells the scheduler to schedule the pod in any location, but giving higher precedence to topologies that would help reduce the skew. A constraint is considered "Unsatisfiable" for an incoming pod if and only if every possible node assignment for that pod would violate "MaxSkew" on some topology. For example, in a 3-zone cluster, MaxSkew is set to 1, and pods with the same labelSelector spread as 3/1/1: zone1 zone2 zone3 P P P P P If WhenUnsatisfiable is set to DoNotSchedule, incoming pod can only be scheduled to zone2(zone3) to become 3/2/1(3/1/2) as ActualSkew(2-1) on zone2(zone3) satisfies MaxSkew(1). In other words, the cluster can still be imbalanced, but scheduler won't make it more imbalanced. It's a required field.

11.1.303. .spec.topologySpreadConstraints[].labelSelector

Description

LabelSelector is used to find matching pods. Pods that match this label selector are counted to determine the number of pods in their corresponding topology domain.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Property	Type	Description
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

11.1.304. .spec.topologySpreadConstraints[].labelSelector.matchExpressions

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

11.1.305. .spec.topologySpreadConstraints[].labelSelector.matchExpressions[]

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

11.1.306. .spec.tracingConfig

Description

Configures tracing.

The configuration format is defined at <https://thanos.io/tip/thanos/tracing.md/#configuration>

This is an **experimental feature**, it may change in any upcoming release in a breaking way.

The operator performs no validation of the configuration.

tracingConfigFile takes precedence over this field.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.307. .spec.volumeMounts

Description

VolumeMounts allows configuration of additional VolumeMounts on the output StatefulSet definition. VolumeMounts specified will be appended to other VolumeMounts in the ruler container, that are generated as a result of StorageSpec objects.

Type

array

11.1.308. .spec.volumeMounts[]

Description

VolumeMount describes a mounting of a Volume within a container.

Type

object

Required

- **mountPath**
- **name**

Property	Type	Description
mountPath	string	Path within the container at which the volume should be mounted. Must not contain ':
mountPropagation	string	mountPropagation determines how mounts are propagated from the host to container and the other way around. When not set, MountPropagationNone is used. This field is beta in 1.10. When RecursiveReadOnly is set to IfPossible or to Enabled, MountPropagation must be None or unspecified (which defaults to None).
name	string	This must match the Name of a Volume.
readOnly	boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.

Property	Type	Description
recursiveReadOnly	string	RecursiveReadOnly specifies whether read-only mounts should be handled recursively. If ReadOnly is false, this field has no meaning and must be unspecified. If ReadOnly is true, and this field is set to Disabled, the mount is not made recursively read-only. If this field is set to IfPossible, the mount is made recursively read-only, if it is supported by the container runtime. If this field is set to Enabled, the mount is made recursively read-only if it is supported by the container runtime, otherwise the pod will not be started and an error will be generated to indicate the reason. If this field is set to IfPossible or Enabled, MountPropagation must be set to None (or be unspecified, which defaults to None). If this field is not specified, it is treated as an equivalent of Disabled.
subPath	string	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root).
subPathExpr	string	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

11.1.309. .spec.volumes

Description

Volumes allows configuration of additional volumes on the output StatefulSet definition. Volumes specified will be appended to other volumes that are generated as a result of StorageSpec objects.

Type

array

11.1.310. .spec.volumes[]

Description

Volume represents a named volume in a pod that may be accessed by any container in the pod.

Type

object

Required

- **name**

Property	Type	Description
awsElasticBlockStore	object	awsElasticBlockStore represents an AWS Disk resource that is attached to a kubelet's host machine and then exposed to the pod. Deprecated: AWSElasticBlockStore is deprecated. All operations for the in-tree awsElasticBlockStore type are redirected to the ebs.csi.aws.com CSI driver. More info: https://kubernetes.io/docs/concepts/storage/volumes#awselasticblockstore
azureDisk	object	azureDisk represents an Azure Data Disk mount on the host and bind mount to the pod. Deprecated: AzureDisk is deprecated. All operations for the in-tree azureDisk type are redirected to the disk.csi.azure.com CSI driver.
azureFile	object	azureFile represents an Azure File Service mount on the host and bind mount to the pod. Deprecated: AzureFile is deprecated. All operations for the in-tree azureFile type are redirected to the file.csi.azure.com CSI driver.

Property	Type	Description
cephfs	object	cephFS represents a Ceph FS mount on the host that shares a pod's lifetime. Deprecated: CephFS is deprecated and the in-tree cephfs type is no longer supported.
cinder	object	cinder represents a cinder volume attached and mounted on kubelets host machine. Deprecated: Cinder is deprecated. All operations for the in-tree cinder type are redirected to the cinder.csi.openstack.org CSI driver. More info: https://examples.k8s.io/mysql-cinder-pd/README.md
configMap	object	configMap represents a configMap that should populate this volume
csi	object	csi (Container Storage Interface) represents ephemeral storage that is handled by certain external CSI drivers.
downwardAPI	object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir

Property	Type	Description
ephemeral	object	ephemeral represents a volume that is handled by a cluster storage driver. The volume's lifecycle is tied to the pod that defines it - it will be created before the pod starts, and deleted when the pod is removed. Use this if: a) the volume is only needed while the pod runs, b) features of normal volumes like restoring from snapshot or capacity tracking are needed, c) the storage driver is specified through a storage class, and d) the storage driver supports dynamic volume provisioning through a PersistentVolumeClaim (see EphemeralVolumeSource for more information on the connection between this volume type and PersistentVolumeClaim). Use PersistentVolumeClaim or one of the vendor-specific APIs for volumes that persist for longer than the lifecycle of an individual pod. Use CSI for light-weight local ephemeral volumes if the CSI driver is meant to be used that way - see the documentation of the driver for more information. A pod can use both types of ephemeral volumes and persistent volumes at the same time.
fc	object	fc represents a Fibre Channel resource that is attached to a kubelet's host machine and then exposed to the pod.
flexVolume	object	flexVolume represents a generic volume resource that is provisioned/attached using an exec based plugin. Deprecated: FlexVolume is deprecated. Consider using a CSIDriver instead.

Property	Type	Description
flocker	object	flocker represents a Flocker volume attached to a kubelet's host machine. This depends on the Flocker control service being running. Deprecated: Flocker is deprecated and the in-tree flocker type is no longer supported.
gcePersistentDisk	object	gcePersistentDisk represents a GCE Disk resource that is attached to a kubelet's host machine and then exposed to the pod. Deprecated: GCEPersistentDisk is deprecated. All operations for the in-tree gcePersistentDisk type are redirected to the pd.csi.storage.gke.io CSI driver. More info: https://kubernetes.io/docs/concepts/storage/volumes#gcepersistentdisk
gitRepo	object	gitRepo represents a git repository at a particular revision. Deprecated: GitRepo is deprecated. To provision a container with a git repo, mount an EmptyDir into an InitContainer that clones the repo using git, then mount the EmptyDir into the Pod's container.
glusterfs	object	glusterfs represents a Glusterfs mount on the host that shares a pod's lifetime. Deprecated: Glusterfs is deprecated and the in-tree glusterfs type is no longer supported. More info: https://examples.k8s.io/volumes/glusterfs/README.md

Property	Type	Description
hostPath	object	hostPath represents a pre-existing file or directory on the host machine that is directly exposed to the container. This is generally used for system agents or other privileged things that are allowed to see the host machine. Most containers will NOT need this. More info: https://kubernetes.io/docs/concepts/storage/volumes#hostpath
image	object	image represents an OCI object (a container image or artifact) pulled and mounted on the kubelet's host machine. The volume is resolved at pod startup depending on which PullPolicy value is provided: - Always: the kubelet always attempts to pull the reference. Container creation will fail if the pull fails. - Never: the kubelet never pulls the reference and only uses a local image or artifact. Container creation will fail if the reference isn't present. - IfNotPresent: the kubelet pulls if the reference isn't already present on disk. Container creation will fail if the reference isn't present and the pull fails. The volume gets re-resolved if the pod gets deleted and recreated, which means that new remote content will become available on pod recreation. A failure to resolve or pull the image during pod startup will block containers from starting and may add significant latency. Failures will be retried using normal volume backoff and will be reported on the pod reason and message. The types of objects that may be mounted by this volume are defined by the container runtime implementation on a host machine and at minimum must include all valid types supported by the container

Property	Type	Description
		image field. The OCI object gets mounted in a single directory (spec.containers[].volumeMounts.mountPath) by merging the manifest layers in the same way as for container images. The volume will be mounted read-only (ro) and non-executable files (noexec). Sub path mounts for containers are not supported (spec.containers[].volumeMounts.subpath) before 1.33. The field spec.securityContext.fsGroupChangePolicy has no effect on this volume type.
iscsi	object	iscsi represents an iSCSI Disk resource that is attached to a kubelet's host machine and then exposed to the pod. More info: https://examples.k8s.io/volumes/iscsi/README.md
name	string	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
nfs	object	nfs represents an NFS mount on the host that shares a pod's lifetime More info: https://kubernetes.io/docs/concepts/storage/volumes#nfs
persistentVolumeClaim	object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
photonPersistentDisk	object	photonPersistentDisk represents a PhotonController persistent disk attached and mounted on kubelets host machine. Deprecated: PhotonPersistentDisk is deprecated and the in-tree photonPersistentDisk type is no longer supported.

Property	Type	Description
portworxVolume	object	portworxVolume represents a portworx volume attached and mounted on kubelets host machine. Deprecated: PortworxVolume is deprecated. All operations for the in-tree portworxVolume type are redirected to the pxd.portworx.com CSI driver when the CSIMigrationPortworx feature-gate is on.
projected	object	projected items for all in one resources secrets, configmaps, and downward API
quobyte	object	quobyte represents a Quobyte mount on the host that shares a pod's lifetime. Deprecated: Quobyte is deprecated and the in-tree quobyte type is no longer supported.
rbd	object	rbd represents a Rados Block Device mount on the host that shares a pod's lifetime. Deprecated: RBD is deprecated and the in-tree rbd type is no longer supported. More info: https://examples.k8s.io/volumes/rbd/README.md
scaleIO	object	scaleIO represents a ScaleIO persistent volume attached and mounted on Kubernetes nodes. Deprecated: ScaleIO is deprecated and the in-tree scaleIO type is no longer supported.
secret	object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Property	Type	Description
storageos	object	storageOS represents a StorageOS volume attached and mounted on Kubernetes nodes. Deprecated: StorageOS is deprecated and the in-tree storageos type is no longer supported.
vsphereVolume	object	vsphereVolume represents a vSphere volume attached and mounted on kubelets host machine. Deprecated: VsphereVolume is deprecated. All operations for the in-tree vsphereVolume type are redirected to the csi.vsphere.vmware.com CSI driver.

11.1.311. .spec.volumes[].awsElasticBlockStore

Description

awsElasticBlockStore represents an AWS Disk resource that is attached to a kubelet's host machine and then exposed to the pod. Deprecated: AWSElasticBlockStore is deprecated. All operations for the in-tree awsElasticBlockStore type are redirected to the ebs.csi.aws.com CSI driver. More info: <https://kubernetes.io/docs/concepts/storage/volumes#awselasticblockstore>

Type

object

Required

- **volumeID**

Property	Type	Description
fsType	string	fsType is the filesystem type of the volume that you want to mount. Tip: Ensure that the filesystem type is supported by the host operating system. Examples: "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified. More info: https://kubernetes.io/docs/concepts/storage/volumes#awselasticblockstore

Property	Type	Description
partition	integer	partition is the partition in the volume that you want to mount. If omitted, the default is to mount by volume name. Examples: For volume /dev/sda1, you specify the partition as "1". Similarly, the volume partition for /dev/sda is "0" (or you can leave the property empty).
readOnly	boolean	readOnly value true will force the readOnly setting in VolumeMounts. More info: https://kubernetes.io/docs/concepts/storage/volumes#awselasticsearchblockstore
volumeID	string	volumeID is unique ID of the persistent disk resource in AWS (Amazon EBS volume). More info: https://kubernetes.io/docs/concepts/storage/volumes#awselasticsearchblockstore

11.1.312. .spec.volumes[].azureDisk

Description

azureDisk represents an Azure Data Disk mount on the host and bind mount to the pod. Deprecated: AzureDisk is deprecated. All operations for the in-tree azureDisk type are redirected to the disk.csi.azure.com CSI driver.

Type

object

Required

- **diskName**
- **diskURI**

Property	Type	Description
cachingMode	string	cachingMode is the Host Caching mode: None, Read Only, Read Write.

Property	Type	Description
diskName	string	diskName is the Name of the data disk in the blob storage
diskURI	string	diskURI is the URI of data disk in the blob storage
fsType	string	fsType is Filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified.
kind	string	kind expected values are Shared: multiple blob disks per storage account Dedicated: single blob disk per storage account Managed: azure managed data disk (only in managed availability set). defaults to shared
readOnly	boolean	readOnly Defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.

11.1.313. .spec.volumes[].azureFile

Description

azureFile represents an Azure File Service mount on the host and bind mount to the pod.

Deprecated: AzureFile is deprecated. All operations for the in-tree azureFile type are redirected to the file.csi.azure.com CSI driver.

Type

object

Required

- **secretName**
- **shareName**

Property	Type	Description

Property	Type	Description
readOnly	boolean	readOnly defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.
secretName	string	secretName is the name of secret that contains Azure Storage Account Name and Key
shareName	string	shareName is the azure share Name

11.1.314. .spec.volumes[].cephfs

Description

cephFS represents a Ceph FS mount on the host that shares a pod's lifetime. Deprecated: CephFS is deprecated and the in-tree cephfs type is no longer supported.

Type

object

Required

- **monitors**

Property	Type	Description
monitors	array (string)	monitors is Required: Monitors is a collection of Ceph monitors More info: https://examples.k8s.io/volumes/cephfs/README.md#how-to-use-it
path	string	path is Optional: Used as the mounted root, rather than the full Ceph tree, default is /
readOnly	boolean	readOnly is Optional: Defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts. More info: https://examples.k8s.io/volumes/cephfs/README.md#how-to-use-it

Property	Type	Description
secretFile	string	secretFile is Optional: SecretFile is the path to key ring for User, default is /etc/ceph/user.secret More info: https://examples.k8s.io/volumes/cephfs/README.md#how-to-use-it
secretRef	object	secretRef is Optional: SecretRef is reference to the authentication secret for User, default is empty. More info: https://examples.k8s.io/volumes/cephfs/README.md#how-to-use-it
user	string	user is optional: User is the rados user name, default is admin More info: https://examples.k8s.io/volumes/cephfs/README.md#how-to-use-it

11.1.315. .spec.volumes[].cephfs.secretRef

Description

secretRef is Optional: SecretRef is reference to the authentication secret for User, default is empty. More info: <https://examples.k8s.io/volumes/cephfs/README.md#how-to-use-it>

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

11.1.316. .spec.volumes[].cinder

Description

cinder represents a cinder volume attached and mounted on kubelets host machine. Deprecated:

Cinder is deprecated. All operations for the in-tree cinder type are redirected to the cinder.csi.openstack.org CSI driver. More info: <https://examples.k8s.io/mysql-cinder-pd/README.md>

Type

object

Required

- **volumeID**

Property	Type	Description
fsType	string	fsType is the filesystem type to mount. Must be a filesystem type supported by the host operating system. Examples: "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified. More info: https://examples.k8s.io/mysql-cinder-pd/README.md
readOnly	boolean	readOnly defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts. More info: https://examples.k8s.io/mysql-cinder-pd/README.md
secretRef	object	secretRef is optional: points to a secret object containing parameters used to connect to OpenStack.
volumeID	string	volumeID used to identify the volume in cinder. More info: https://examples.k8s.io/mysql-cinder-pd/README.md

11.1.317. .spec.volumes[].cinder.secretRef

Description

secretRef is optional: points to a secret object containing parameters used to connect to OpenStack.

Type

object

Property	Type	Description

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

11.1.318. .spec.volumes[].configMap

Description

configMap represents a configMap that should populate this volume

Type

object

Property	Type	Description
defaultMode	integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Property	Type	Description
items	array	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.
items[]	object	Maps a string key to a path within a volume.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	optional specify whether the ConfigMap or its keys must be defined

11.1.319. .spec.volumes[].configMap.items

Description

items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.

Type

array

11.1.320. .spec.volumes[].configMap.items[]

Description

Maps a string key to a path within a volume.

Type

object

Required

- **key**
- **path**

Property	Type	Description
key	string	key is the key to project.
mode	integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	string	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

11.1.321. .spec.volumes[].csi

Description

csi (Container Storage Interface) represents ephemeral storage that is handled by certain external CSI drivers.

Type

object

Required

- **driver**

Property	Type	Description
driver	string	driver is the name of the CSI driver that handles this volume. Consult with your admin for the correct name as registered in the cluster.
fsType	string	fsType to mount. Ex. "ext4", "xfs", "ntfs". If not provided, the empty value is passed to the associated CSI driver which will determine the default filesystem to apply.
nodePublishSecretRef	object	nodePublishSecretRef is a reference to the secret object containing sensitive information to pass to the CSI driver to complete the CSI NodePublishVolume and NodeUnpublishVolume calls. This field is optional, and may be empty if no secret is required. If the secret object contains more than one secret, all secret references are passed.
readOnly	boolean	readOnly specifies a read-only configuration for the volume. Defaults to false (read/write).
volumeAttributes	object (string)	volumeAttributes stores driver-specific properties that are passed to the CSI driver. Consult your driver's documentation for supported values.

11.1.322. .spec.volumes[].csi.nodePublishSecretRef

Description

nodePublishSecretRef is a reference to the secret object containing sensitive information to pass to the CSI driver to complete the CSI NodePublishVolume and NodeUnpublishVolume calls. This field is optional, and may be empty if no secret is required. If the secret object contains more than one secret, all secret references are passed.

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

11.1.323. .spec.volumes[].downwardAPI

Description

downwardAPI represents downward API about the pod that should populate this volume

Type

object

Property	Type	Description
defaultMode	integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	array	Items is a list of downward API volume file
items[]	object	DownwardAPIVolumeFile represents information to create the file containing the pod field

11.1.324. .spec.volumes[].downwardAPI.items

Description

Items is a list of downward API volume file

Type

array

11.1.325. .spec.volumes[].downwardAPI.items[]

Description

DownwardAPIVolumeFile represents information to create the file containing the pod field

Type

object

Required

- **path**

Property	Type	Description
fieldRef	object	Required: Selects a field of the pod: only annotations, labels, name, namespace and uid are supported.
mode	integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	string	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

11.1.326. .spec.volumes[].downwardAPI.items[].fieldRef

Description

Required: Selects a field of the pod: only annotations, labels, name, namespace and uid are supported.

Type

object

Required

- **fieldPath**

Property	Type	Description
apiVersion	string	Version of the schema the FieldPath is written in terms of, defaults to "v1".
fieldPath	string	Path of the field to select in the specified API version.

11.1.327. .spec.volumes[].downwardAPI.items[].resourceFieldRef

Description

Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Type

object

Required

- **resource**

Property	Type	Description
containerName	string	Container name: required for volumes, optional for env vars
divisor	integer-or-string	Specifies the output format of the exposed resources, defaults to "1"
resource	string	Required: resource to select

11.1.328. .spec.volumes[].emptyDir

Description

emptyDir represents a temporary directory that shares a pod's lifetime. More info:
<https://kubernetes.io/docs/concepts/storage/volumes#emptydir>

Type

object

Property	Type	Description
medium	string	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	integer-or-string	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir

11.1.329. .spec.volumes[].ephemeral

Description

ephemeral represents a volume that is handled by a cluster storage driver. The volume's lifecycle is tied to the pod that defines it - it will be created before the pod starts, and deleted when the pod is removed.

Use this if: a) the volume is only needed while the pod runs, b) features of normal volumes like restoring from snapshot or capacity tracking are needed, c) the storage driver is specified through a storage class, and d) the storage driver supports dynamic volume provisioning through a PersistentVolumeClaim (see EphemeralVolumeSource for more information on the connection between this volume type and PersistentVolumeClaim).

Use PersistentVolumeClaim or one of the vendor-specific APIs for volumes that persist for longer than the lifecycle of an individual pod.

Use CSI for light-weight local ephemeral volumes if the CSI driver is meant to be used that way - see the documentation of the driver for more information.

A pod can use both types of ephemeral volumes and persistent volumes at the same time.

Type

object

Property	Type	Description
volumeClaimTemplate	object	Will be used to create a stand-alone PVC to provision the volume. The pod in which this EphemeralVolumeSource is embedded will be the owner of the PVC, i.e. the PVC will be deleted together with the pod. The name of the PVC will be <pod name>-<volume name> where <volume name> is the name from the PodSpec.Volumes array entry. Pod validation will reject the pod if the concatenated name is not valid for a PVC (for example, too long). An existing PVC with that name that is not owned by the pod will not be used for the pod to avoid using an unrelated volume by mistake. Starting the pod is then blocked until the unrelated PVC is removed. If such a pre-created PVC is meant to be used by the pod, the PVC has to updated with an owner reference to the pod once the pod exists. Normally this should not be necessary, but it may be useful when manually reconstructing a broken cluster. This field is read-only and no changes will be made by Kubernetes to the PVC after it has been created. Required, must not be nil.

11.1.330. .spec.volumes[].ephemeral.volumeClaimTemplate**Description**

Will be used to create a stand-alone PVC to provision the volume. The pod in which this EphemeralVolumeSource is embedded will be the owner of the PVC, i.e. the PVC will be deleted together with the pod. The name of the PVC will be **<pod name>-<volume name>** where **<volume name>** is the name from the **PodSpec.Volumes** array entry. Pod validation will reject the pod if the concatenated name is not valid for a PVC (for example, too long).

An existing PVC with that name that is not owned by the pod will **not** be used for the pod to avoid using an unrelated volume by mistake. Starting the pod is then blocked until the unrelated PVC is removed. If such a pre-created PVC is meant to be used by the pod, the PVC has to updated with an

owner reference to the pod once the pod exists. Normally this should not be necessary, but it may be useful when manually reconstructing a broken cluster.

This field is read-only and no changes will be made by Kubernetes to the PVC after it has been created.

Required, must not be nil.

Type

object

Required

- **spec**

Property	Type	Description
metadata	object	May contain labels and annotations that will be copied into the PVC when creating it. No other fields are allowed and will be rejected during validation.
spec	object	The specification for the PersistentVolumeClaim. The entire content is copied unchanged into the PVC that gets created from this template. The same fields as in a PersistentVolumeClaim are also valid here.

11.1.331. `.spec.volumes[].ephemeral.volumeClaimTemplate.metadata`

Description

May contain labels and annotations that will be copied into the PVC when creating it. No other fields are allowed and will be rejected during validation.

Type

object

11.1.332. `.spec.volumes[].ephemeral.volumeClaimTemplate.spec`

Description

The specification for the PersistentVolumeClaim. The entire content is copied unchanged into the PVC that gets created from this template. The same fields as in a PersistentVolumeClaim are also valid here.

Type

object

Property	Type	Description
accessModes	array (string)	accessModes contains the desired access modes the volume should have. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#access-modes-1
dataSource	object	dataSource field can be used to specify either: * An existing VolumeSnapshot object (snapshot.storage.k8s.io/VolumeSnapshot) * An existing PVC (PersistentVolumeClaim) If the provisioner or an external controller can support the specified data source, it will create a new volume based on the contents of the specified data source. When the AnyVolumeDataSource feature gate is enabled, dataSource contents will be copied to dataSourceRef, and dataSourceRef contents will be copied to dataSource when dataSourceRef.namespace is not specified. If the namespace is specified, then dataSourceRef will not be copied to dataSource.

Property	Type	Description
dataSourceRef	object	dataSourceRef specifies the object from which to populate the volume with data, if a non-empty volume is desired. This may be any object from a non-empty API group (non core object) or a PersistentVolumeClaim object. When this field is specified, volume binding will only succeed if the type of the specified object matches some installed volume populator or dynamic provisioner. This field will replace the functionality of the dataSource field and as such if both fields are non-empty, they must have the same value. For backwards compatibility, when namespace isn't specified in dataSourceRef, both fields (dataSource and dataSourceRef) will be set to the same value automatically if one of them is empty and the other is non-empty. When namespace is specified in dataSourceRef, dataSource isn't set to the same value and must be empty. There are three important differences between dataSource and dataSourceRef: * - While dataSource only allows two specific types of objects, dataSourceRef allows any non-core object, as well as PersistentVolumeClaim objects. * - While dataSource ignores disallowed values (dropping them), dataSourceRef preserves all values, and generates an error if a disallowed value is specified. * - While dataSource only allows local objects, dataSourceRef allows objects in any namespaces. (Beta) Using this field requires the AnyVolumeDataSource feature gate to be enabled. (Alpha) Using the namespace field of dataSourceRef requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

Property	Type	Description
resources	object	resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources
selector	object	selector is a label query over volumes to consider for binding.
storageClassName	string	storageClassName is the name of the StorageClass required by the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#class-1

Property	Type	Description
volumeAttributesClassName	string	volumeAttributesClassName may be used to set the VolumeAttributesClass used by this claim. If specified, the CSI driver will create or update the volume with the attributes defined in the corresponding VolumeAttributesClass. This has a different purpose than storageClassName, it can be changed after the claim is created. An empty string value means that no VolumeAttributesClass will be applied to the claim but it's not allowed to reset this field to empty string once it is set. If unspecified and the PersistentVolumeClaim is unbound, the default VolumeAttributesClass will be set by the persistentvolume controller if it exists. If the resource referred to by volumeAttributesClass does not exist, this PersistentVolumeClaim will be set to a Pending state, as reflected by the modifyVolumeStatus field, until such as a resource exists. More info: https://kubernetes.io/docs/concepts/storage/volume-attributes-classes/ (Beta) Using this field requires the VolumeAttributesClass feature gate to be enabled (off by default).
volumeMode	string	volumeMode defines what type of volume is required by the claim. Value of Filesystem is implied when not included in claim spec.
volumeName	string	volumeName is the binding reference to the PersistentVolume backing this claim.

11.1.333. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.dataSource

Description

dataSource field can be used to specify either: * An existing VolumeSnapshot object (snapshot.storage.k8s.io/VolumeSnapshot) * An existing PVC (PersistentVolumeClaim) If the provisioner or an external controller can support the specified data source, it will create a new volume based on the contents of the specified data source. When the AnyVolumeDataSource feature gate is enabled, dataSource contents will be copied to dataSourceRef, and dataSourceRef contents will be copied to dataSource when dataSourceRef.namespace is not specified. If the namespace is specified, then dataSourceRef will not be copied to dataSource.

Type

object

Required

- **kind**
- **name**

Property	Type	Description
apiGroup	string	APIGroup is the group for the resource being referenced. If APIGroup is not specified, the specified Kind must be in the core API group. For any other third-party types, APIGroup is required.
kind	string	Kind is the type of resource being referenced
name	string	Name is the name of resource being referenced

11.1.334. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.dataSourceRef

Description

dataSourceRef specifies the object from which to populate the volume with data, if a non-empty volume is desired. This may be any object from a non-empty API group (non core object) or a PersistentVolumeClaim object. When this field is specified, volume binding will only succeed if the type of the specified object matches some installed volume populator or dynamic provisioner. This field will replace the functionality of the dataSource field and as such if both fields are non-empty, they must have the same value. For backwards compatibility, when namespace isn't specified in dataSourceRef, both fields (dataSource and dataSourceRef) will be set to the same value automatically if one of them is empty and the other is non-empty. When namespace is specified in dataSourceRef, dataSource isn't set to the same value and must be empty. There are three important differences between dataSource and dataSourceRef: * While dataSource only allows two specific types of objects, dataSourceRef allows any non-core object, as well as PersistentVolumeClaim objects. * While dataSource ignores disallowed values (dropping them), dataSourceRef preserves all values, and generates an error if a disallowed value is specified. * While dataSource only allows local objects, dataSourceRef allows objects in any namespaces. (Beta) Using this field requires the AnyVolumeDataSource feature gate to be enabled. (Alpha) Using the namespace field of dataSourceRef requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

Type**object****Required**

- **kind**
- **name**

Property	Type	Description
apiGroup	string	APIGroup is the group for the resource being referenced. If APIGroup is not specified, the specified Kind must be in the core API group. For any other third-party types, APIGroup is required.
kind	string	Kind is the type of resource being referenced
name	string	Name is the name of resource being referenced
namespace	string	Namespace is the namespace of resource being referenced Note that when a namespace is specified, a gateway.networking.k8s.io/ReferenceGrant object is required in the referent namespace to allow that namespace's owner to accept the reference. See the ReferenceGrant documentation for details. (Alpha) This field requires the CrossNamespaceVolumeDataSource feature gate to be enabled.

11.1.335. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.resources

Description

resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: <https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources>

Type**object**

Property	Type	Description
limits	integer-or-string	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
requests	integer-or-string	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. Requests cannot exceed Limits. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

11.1.336. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.selector

Description

selector is a label query over volumes to consider for binding.

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

11.1.337. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.selector.matchExpres

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

11.1.338. .spec.volumes[].ephemeral.volumeClaimTemplate.spec.selector.matchExpres**Description**

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

11.1.339. .spec.volumes[].fc**Description**

fc represents a Fibre Channel resource that is attached to a kubelet's host machine and then exposed to the pod.

Type

object

Property	Type	Description
fsType	string	fsType is the filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified.
lun	integer	lun is Optional: FC target lun number
readOnly	boolean	readOnly is Optional: Defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.
targetWWNs	array (string)	targetWWNs is Optional: FC target worldwide names (WWNs)
wwids	array (string)	wwids Optional: FC volume world wide identifiers (wwids) Either wwids or combination of targetWWNs and lun must be set, but not both simultaneously.

11.1.340. .spec.volumes[].flexVolume

Description

flexVolume represents a generic volume resource that is provisioned/attached using an exec based plugin. Deprecated: FlexVolume is deprecated. Consider using a CSIDriver instead.

Type

object

Required

- **driver**

Property	Type	Description
driver	string	driver is the name of the driver to use for this volume.

Property	Type	Description
fsType	string	fsType is the filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". The default filesystem depends on FlexVolume script.
options	object (string)	options is Optional: this field holds extra command options if any.
readOnly	boolean	readOnly is Optional: defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.
secretRef	object	secretRef is Optional: secretRef is reference to the secret object containing sensitive information to pass to the plugin scripts. This may be empty if no secret object is specified. If the secret object contains more than one secret, all secrets are passed to the plugin scripts.

11.1.341. .spec.volumes[].flexVolume.secretRef

Description

secretRef is Optional: secretRef is reference to the secret object containing sensitive information to pass to the plugin scripts. This may be empty if no secret object is specified. If the secret object contains more than one secret, all secrets are passed to the plugin scripts.

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

11.1.342. .spec.volumes[].flocker

Description

flocker represents a Flocker volume attached to a kubelet's host machine. This depends on the Flocker control service being running. Deprecated: Flocker is deprecated and the in-tree flocker type is no longer supported.

Type

object

Property	Type	Description
datasetName	string	datasetName is Name of the dataset stored as metadata → name on the dataset for Flocker should be considered as deprecated
datasetUUID	string	datasetUUID is the UUID of the dataset. This is unique identifier of a Flocker dataset

11.1.343. .spec.volumes[].gcePersistentDisk**Description**

gcePersistentDisk represents a GCE Disk resource that is attached to a kubelet's host machine and then exposed to the pod. Deprecated: GCEPersistentDisk is deprecated. All operations for the in-tree gcePersistentDisk type are redirected to the pd.csi.storage.gke.io CSI driver. More info: <https://kubernetes.io/docs/concepts/storage/volumes#gcepersistentdisk>

Type

object

Required

- **pdName**

Property	Type	Description
fsType	string	fsType is filesystem type of the volume that you want to mount. Tip: Ensure that the filesystem type is supported by the host operating system. Examples: "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified. More info: https://kubernetes.io/docs/concepts/storage/volumes#gcepersistentdisk

Property	Type	Description
partition	integer	partition is the partition in the volume that you want to mount. If omitted, the default is to mount by volume name. Examples: For volume /dev/sda1, you specify the partition as "1". Similarly, the volume partition for /dev/sda is "0" (or you can leave the property empty). More info: https://kubernetes.io/docs/concepts/storage/volumes#gcepersistentdisk
pdName	string	pdName is unique name of the PD resource in GCE. Used to identify the disk in GCE. More info: https://kubernetes.io/docs/concepts/storage/volumes#gcepersistentdisk
readOnly	boolean	readOnly here will force the ReadOnly setting in VolumeMounts. Defaults to false. More info: https://kubernetes.io/docs/concepts/storage/volumes#gcepersistentdisk

11.1.344. .spec.volumes[].gitRepo

Description

gitRepo represents a git repository at a particular revision. **Deprecated:** GitRepo is deprecated. To provision a container with a git repo, mount an EmptyDir into an InitContainer that clones the repo using git, then mount the EmptyDir into the Pod's container.

Type

object

Required

- **repository**

Property	Type	Description

Property	Type	Description
directory	string	directory is the target directory name. Must not contain or start with '..'. If '.' is supplied, the volume directory will be the git repository. Otherwise, if specified, the volume will contain the git repository in the subdirectory with the given name.
repository	string	repository is the URL
revision	string	revision is the commit hash for the specified revision.

11.1.345. .spec.volumes[].glusterfs

Description

glusterfs represents a Glusterfs mount on the host that shares a pod's lifetime. Deprecated: Glusterfs is deprecated and the in-tree glusterfs type is no longer supported. More info: <https://examples.k8s.io/volumes/glusterfs/README.md>

Type

object

Required

- **endpoints**
- **path**

Property	Type	Description
endpoints	string	endpoints is the endpoint name that details Glusterfs topology. More info: https://examples.k8s.io/volumes/glusterfs/README.md#create-a-pod
path	string	path is the Glusterfs volume path. More info: https://examples.k8s.io/volumes/glusterfs/README.md#create-a-pod

Property	Type	Description
readOnly	boolean	readOnly here will force the Glusterfs volume to be mounted with read-only permissions. Defaults to false. More info: https://examples.k8s.io/volumes/glusterfs/README.md#create-a-pod

11.1.346. .spec.volumes[].hostPath

Description

hostPath represents a pre-existing file or directory on the host machine that is directly exposed to the container. This is generally used for system agents or other privileged things that are allowed to see the host machine. Most containers will NOT need this. More info:

<https://kubernetes.io/docs/concepts/storage/volumes#hostpath>

Type

object

Required

- **path**

Property	Type	Description
path	string	path of the directory on the host. If the path is a symlink, it will follow the link to the real path. More info: https://kubernetes.io/docs/concepts/storage/volumes#hostpath
type	string	type for HostPath Volume Defaults to "" More info: https://kubernetes.io/docs/concepts/storage/volumes#hostpath

11.1.347. .spec.volumes[].image

Description

image represents an OCI object (a container image or artifact) pulled and mounted on the kubelet's host machine. The volume is resolved at pod startup depending on which PullPolicy value is provided:

- Always: the kubelet always attempts to pull the reference. Container creation will fail if the pull fails.
- Never: the kubelet never pulls the reference and only uses a local image or artifact. Container creation will fail if the reference isn't present.

- **IfNotPresent**: the kubelet pulls if the reference isn't already present on disk. Container creation will fail if the reference isn't present and the pull fails.

The volume gets re-resolved if the pod gets deleted and recreated, which means that new remote content will become available on pod recreation. A failure to resolve or pull the image during pod startup will block containers from starting and may add significant latency. Failures will be retried using normal volume backoff and will be reported on the pod reason and message. The types of objects that may be mounted by this volume are defined by the container runtime implementation on a host machine and at minimum must include all valid types supported by the container image field. The OCI object gets mounted in a single directory (`spec.containers[].volumeMounts.mountPath`) **by merging the manifest layers in the same way as for container images. The volume will be mounted read-only (ro) and non-executable files (noexec). Sub path mounts for containers are not supported (`spec.containers[].volumeMounts.subpath`) before 1.33.** The field `spec.securityContext.fsGroupChangePolicy` has no effect on this volume type.

Type

object

Property	Type	Description
pullPolicy	string	Policy for pulling OCI objects. Possible values are: Always : the kubelet always attempts to pull the reference. Container creation will fail if the pull fails. Never : the kubelet never pulls the reference and only uses a local image or artifact. Container creation will fail if the reference isn't present. IfNotPresent : the kubelet pulls if the reference isn't already present on disk. Container creation will fail if the reference isn't present and the pull fails. Defaults to Always if :latest tag is specified, or IfNotPresent otherwise.

Property	Type	Description
reference	string	Required: Image or artifact reference to be used. Behaves in the same way as <code>pod.spec.containers[*].image</code> . Pull secrets will be assembled in the same way as for the container image by looking up node credentials, SA image pull secrets, and pod spec image pull secrets. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.

11.1.348. .spec.volumes[].iscsi

Description

iscsi represents an iSCSI Disk resource that is attached to a kubelet's host machine and then exposed to the pod. More info: <https://examples.k8s.io/volumes/iscsi/README.md>

Type

object

Required

- **iqn**
- **lun**
- **targetPortal**

Property	Type	Description
chapAuthDiscovery	boolean	chapAuthDiscovery defines whether support iSCSI Discovery CHAP authentication
chapAuthSession	boolean	chapAuthSession defines whether support iSCSI Session CHAP authentication

Property	Type	Description
fsType	string	fsType is the filesystem type of the volume that you want to mount. Tip: Ensure that the filesystem type is supported by the host operating system. Examples: "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified. More info: https://kubernetes.io/docs/concepts/storage/volumes#iscsi
initiatorName	string	initiatorName is the custom iSCSI Initiator Name. If initiatorName is specified with iscsiInterface simultaneously, new iSCSI interface <target portal>:<volume name> will be created for the connection.
iqn	string	iqn is the target iSCSI Qualified Name.
iscsilInterface	string	iscsilInterface is the interface Name that uses an iSCSI transport. Defaults to 'default' (tcp).
lun	integer	lun represents iSCSI Target Lun number.
portals	array (string)	portals is the iSCSI Target Portal List. The portal is either an IP or ip_addr:port if the port is other than default (typically TCP ports 860 and 3260).
readOnly	boolean	readOnly here will force the ReadOnly setting in VolumeMounts. Defaults to false.
secretRef	object	secretRef is the CHAP Secret for iSCSI target and initiator authentication
targetPortal	string	targetPortal is iSCSI Target Portal. The Portal is either an IP or ip_addr:port if the port is other than default (typically TCP ports 860 and 3260).

11.1.349. .spec.volumes[].iscsi.secretRef

Description

secretRef is the CHAP Secret for iSCSI target and initiator authentication

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

11.1.350. .spec.volumes[].nfs

Description

nfs represents an NFS mount on the host that shares a pod's lifetime More info: <https://kubernetes.io/docs/concepts/storage/volumes#nfs>

Type

object

Required

- **path**
- **server**

Property	Type	Description
path	string	path that is exported by the NFS server. More info: https://kubernetes.io/docs/concepts/storage/volumes#nfs
readOnly	boolean	readOnly here will force the NFS export to be mounted with read-only permissions. Defaults to false. More info: https://kubernetes.io/docs/concepts/storage/volumes#nfs

Property	Type	Description
server	string	server is the hostname or IP address of the NFS server. More info: https://kubernetes.io/docs/concepts/storage/volumes#nfs

11.1.351. .spec.volumes[].persistentVolumeClaim

Description

`persistentVolumeClaimVolumeSource` represents a reference to a `PersistentVolumeClaim` in the same namespace. More info: <https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims>

Type

object

Required

- **claimName**

Property	Type	Description
claimName	string	<code>claimName</code> is the name of a <code>PersistentVolumeClaim</code> in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
readOnly	boolean	<code>readOnly</code> Will force the <code>ReadOnly</code> setting in <code>VolumeMounts</code> . Default <code>false</code> .

11.1.352. .spec.volumes[].photonPersistentDisk

Description

`photonPersistentDisk` represents a `PhotonController` persistent disk attached and mounted on kubelets host machine. **Deprecated:** `PhotonPersistentDisk` is deprecated and the in-tree `photonPersistentDisk` type is no longer supported.

Type

object

Required

- **pdID**

Property	Type	Description
fsType	string	fsType is the filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified.
pdID	string	pdID is the ID that identifies Photon Controller persistent disk

11.1.353. .spec.volumes[].portworxVolume

Description

portworxVolume represents a portworx volume attached and mounted on kubelets host machine.
 Deprecated: PortworxVolume is deprecated. All operations for the in-tree portworxVolume type are redirected to the pxd.portworx.com CSI driver when the CSIMigrationPortworx feature-gate is on.

Type

object

Required

- **volumeID**

Property	Type	Description
fsType	string	fSType represents the filesystem type to mount Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs". Implicitly inferred to be "ext4" if unspecified.
readOnly	boolean	readOnly defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.
volumeID	string	volumeID uniquely identifies a Portworx volume

11.1.354. .spec.volumes[].projected

Description

projected items for all in one resources secrets, configmaps, and downward API

Type

object

Property	Type	Description
defaultMode	integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	array	sources is the list of volume projections. Each entry in this list handles one source.
sources[]	object	Projection that may be projected along with other supported volume types. Exactly one of these fields must be set.

11.1.355. .spec.volumes[].projected.sources

Description

sources is the list of volume projections. Each entry in this list handles one source.

Type

array

11.1.356. .spec.volumes[].projected.sources[]

Description

Projection that may be projected along with other supported volume types. Exactly one of these fields must be set.

Type

object

Property	Type	Description

Property	Type	Description
clusterTrustBundle	object	ClusterTrustBundle allows a pod to access the .spec.trustBundle field of ClusterTrustBundle objects in an auto-updating file. Alpha, gated by the ClusterTrustBundleProjection feature gate. ClusterTrustBundle objects can either be selected by name, or by the combination of signer name and a label selector. Kubelet performs aggressive normalization of the PEM contents written into the pod filesystem. Esoteric PEM features such as inter-block comments and block headers are stripped. Certificates are deduplicated. The ordering of certificates within the file is arbitrary, and Kubelet may change the order over time.
configMap	object	configMap information about the configMap data to project
downwardAPI	object	downwardAPI information about the downwardAPI data to project
secret	object	secret information about the secret data to project
serviceAccountToken	object	serviceAccountToken is information about the serviceAccountToken data to project

11.1.357. .spec.volumes[].projected.sources[].clusterTrustBundle

Description

ClusterTrustBundle allows a pod to access the **.spec.trustBundle** field of ClusterTrustBundle objects in an auto-updating file.

Alpha, gated by the ClusterTrustBundleProjection feature gate.

ClusterTrustBundle objects can either be selected by name, or by the combination of signer name and a label selector.

Kubelet performs aggressive normalization of the PEM contents written into the pod filesystem. Esoteric PEM features such as inter-block comments and block headers are stripped. Certificates are deduplicated. The ordering of certificates within the file is arbitrary, and Kubelet may change the order over time.

Type

object

Required

- **path**

Property	Type	Description
labelSelector	object	Select all ClusterTrustBundles that match this label selector. Only has effect if signerName is set. Mutually-exclusive with name. If unset, interpreted as "match nothing". If set but empty, interpreted as "match everything".
name	string	Select a single ClusterTrustBundle by object name. Mutually-exclusive with signerName and labelSelector.
optional	boolean	If true, don't block pod startup if the referenced ClusterTrustBundle(s) aren't available. If using name, then the named ClusterTrustBundle is allowed not to exist. If using signerName, then the combination of signerName and labelSelector is allowed to match zero ClusterTrustBundles.
path	string	Relative path from the volume root to write the bundle.
signerName	string	Select all ClusterTrustBundles that match this signer name. Mutually-exclusive with name. The contents of all selected ClusterTrustBundles will be unified and deduplicated.

11.1.358. .spec.volumes[].projected.sources[].clusterTrustBundle.labelSelector

Description

Select all ClusterTrustBundles that match this label selector. Only has effect if signerName is set. Mutually-exclusive with name. If unset, interpreted as "match nothing". If set but empty, interpreted as "match everything".

Type

object

Property	Type	Description
matchExpressions	array	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchExpressions[]	object	A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.
matchLabels	object (string)	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

11.1.359. .spec.volumes[].projected.sources[].clusterTrustBundle.labelSelector.matchE

Description

matchExpressions is a list of label selector requirements. The requirements are ANDed.

Type

array

11.1.360. .spec.volumes[].projected.sources[].clusterTrustBundle.labelSelector.matchE

Description

A label selector requirement is a selector that contains values, a key, and an operator that relates the key and values.

Type

object

Required

- **key**
- **operator**

Property	Type	Description
key	string	key is the label key that the selector applies to.
operator	string	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	array (string)	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

11.1.361. .spec.volumes[].projected.sources[].configMap

Description

configMap information about the configMap data to project

Type

object

Property	Type	Description
items	array	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.
items[]	object	Maps a string key to a path within a volume.

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	optional specify whether the ConfigMap or its keys must be defined

11.1.362. .spec.volumes[].projected.sources[].configMap.items

Description

items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.

Type

array

11.1.363. .spec.volumes[].projected.sources[].configMap.items[]

Description

Maps a string key to a path within a volume.

Type

object

Required

- **key**
- **path**

Property	Type	Description
key	string	key is the key to project.

Property	Type	Description
mode	integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	string	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

11.1.364. .spec.volumes[].projected.sources[].downwardAPI

Description

downwardAPI information about the downwardAPI data to project

Type

object

Property	Type	Description
items	array	Items is a list of DownwardAPIVolume file
items[]	object	DownwardAPIVolumeFile represents information to create the file containing the pod field

11.1.365. .spec.volumes[].projected.sources[].downwardAPI.items

Description

Items is a list of DownwardAPIVolume file

Type

array

11.1.366. .spec.volumes[].projected.sources[].downwardAPI.items[]

Description

DownwardAPIVolumeFile represents information to create the file containing the pod field

Type

object

Required

- **path**

Property	Type	Description
fieldRef	object	Required: Selects a field of the pod: only annotations, labels, name, namespace and uid are supported.
mode	integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	string	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

11.1.367. .spec.volumes[].projected.sources[].downwardAPI.items[].fieldRef**Description**

Required: Selects a field of the pod: only annotations, labels, name, namespace and uid are supported.

Type

object**Required**

- **fieldPath**

Property	Type	Description
apiVersion	string	Version of the schema the FieldPath is written in terms of, defaults to "v1".
fieldPath	string	Path of the field to select in the specified API version.

11.1.368. .spec.volumes[].projected.sources[].downwardAPI.items[].resourceFieldRef**Description**

Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Type**object****Required**

- **resource**

Property	Type	Description
containerName	string	Container name: required for volumes, optional for env vars
divisor	integer-or-string	Specifies the output format of the exposed resources, defaults to "1"
resource	string	Required: resource to select

11.1.369. .spec.volumes[].projected.sources[].secret**Description**

secret information about the secret data to project

Type**object**

Property	Type	Description
items	array	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.
items[]	object	Maps a string key to a path within a volume.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	optional field specify whether the Secret or its key must be defined

11.1.370. .spec.volumes[].projected.sources[].secret.items

Description

items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.

Type

array

11.1.371. .spec.volumes[].projected.sources[].secret.items[]

Description

Maps a string key to a path within a volume.

Type

object**Required**

- **key**
- **path**

Property	Type	Description
key	string	key is the key to project.
mode	integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	string	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

11.1.372. .spec.volumes[].projected.sources[].serviceAccountToken**Description**

serviceAccountToken is information about the serviceAccountToken data to project

Type**object****Required**

- **path**

Property	Type	Description

Property	Type	Description
audience	string	audience is the intended audience of the token. A recipient of a token must identify itself with an identifier specified in the audience of the token, and otherwise should reject the token. The audience defaults to the identifier of the apiserver.
expirationSeconds	integer	expirationSeconds is the requested duration of validity of the service account token. As the token approaches expiration, the kubelet volume plugin will proactively rotate the service account token. The kubelet will start trying to rotate the token if the token is older than 80 percent of its time to live or if the token is older than 24 hours. Defaults to 1 hour and must be at least 10 minutes.
path	string	path is the path relative to the mount point of the file to project the token into.

11.1.373. .spec.volumes[].quobyte

Description

quobyte represents a Quobyte mount on the host that shares a pod's lifetime. Deprecated: Quobyte is deprecated and the in-tree quobyte type is no longer supported.

Type

object

Required

- **registry**
- **volume**

Property	Type	Description
group	string	group to map volume access to Default is no group

Property	Type	Description
readOnly	boolean	readOnly here will force the Quobyte volume to be mounted with read-only permissions. Defaults to false.
registry	string	registry represents a single or multiple Quobyte Registry services specified as a string as host:port pair (multiple entries are separated with commas) which acts as the central registry for volumes
tenant	string	tenant owning the given Quobyte volume in the Backend Used with dynamically provisioned Quobyte volumes, value is set by the plugin
user	string	user to map volume access to Defaults to serviceaccount user
volume	string	volume is a string that references an already created Quobyte volume by name.

11.1.374. .spec.volumes[].rbd

Description

rbd represents a Rados Block Device mount on the host that shares a pod's lifetime. Deprecated: RBD is deprecated and the in-tree rbd type is no longer supported. More info:

<https://examples.k8s.io/volumes/rbd/README.md>

Type

object

Required

- **image**
- **monitors**

Property	Type	Description

Property	Type	Description
fsType	string	fsType is the filesystem type of the volume that you want to mount. Tip: Ensure that the filesystem type is supported by the host operating system. Examples: "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified. More info: https://kubernetes.io/docs/concepts/storage/volumes#rbd
image	string	image is the rados image name. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it
keyring	string	keyring is the path to key ring for RBDUser. Default is /etc/ceph/keyring. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it
monitors	array (string)	monitors is a collection of Ceph monitors. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it
pool	string	pool is the rados pool name. Default is rbd. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it
readOnly	boolean	readOnly here will force the ReadOnly setting in VolumeMounts. Defaults to false. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it
secretRef	object	secretRef is name of the authentication secret for RBDUser. If provided overrides keyring. Default is nil. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it
user	string	user is the rados user name. Default is admin. More info: https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it

11.1.375. .spec.volumes[].rbd.secretRef

Description

secretRef is name of the authentication secret for RBDUser. If provided overrides keyring. Default is nil. More info: <https://examples.k8s.io/volumes/rbd/README.md#how-to-use-it>

Type

object

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

11.1.376. .spec.volumes[].scaleIO

Description

scaleIO represents a ScaleIO persistent volume attached and mounted on Kubernetes nodes.
Deprecated: ScaleIO is deprecated and the in-tree scaleIO type is no longer supported.

Type

object

Required

- **gateway**
- **secretRef**
- **system**

Property	Type	Description
fsType	string	fsType is the filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". Default is "xfs".
gateway	string	gateway is the host address of the ScaleIO API Gateway.

Property	Type	Description
protectionDomain	string	protectionDomain is the name of the ScaleIO Protection Domain for the configured storage.
readOnly	boolean	readOnly Defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.
secretRef	object	secretRef references to the secret for ScaleIO user and other sensitive information. If this is not provided, Login operation will fail.
sslEnabled	boolean	sslEnabled Flag enable/disable SSL communication with Gateway, default false
storageMode	string	storageMode indicates whether the storage for a volume should be ThickProvisioned or ThinProvisioned. Default is ThinProvisioned.
storagePool	string	storagePool is the ScaleIO Storage Pool associated with the protection domain.
system	string	system is the name of the storage system as configured in ScaleIO.
volumeName	string	volumeName is the name of a volume already created in the ScaleIO system that is associated with this volume source.

11.1.377. .spec.volumes[].scaleIO.secretRef

Description

secretRef references to the secret for ScaleIO user and other sensitive information. If this is not provided, Login operation will fail.

Type

object

Property	Type	Description

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

11.1.378. .spec.volumes[].secret

Description

secret represents a secret that should populate this volume. More info: <https://kubernetes.io/docs/concepts/storage/volumes#secret>

Type

object

Property	Type	Description
defaultMode	integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Property	Type	Description
items	array	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.
items[]	object	Maps a string key to a path within a volume.
optional	boolean	optional field specify whether the Secret or its keys must be defined
secretName	string	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

11.1.379. .spec.volumes[].secret.items

Description

items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Paths must be relative and may not contain the '..' path or start with '..'.

Type

array

11.1.380. .spec.volumes[].secret.items[]

Description

Maps a string key to a path within a volume.

Type

object

Required

- **key**
- **path**

Property	Type	Description
key	string	key is the key to project.
mode	integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	string	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

11.1.381. .spec.volumes[].storageos

Description

storageOS represents a StorageOS volume attached and mounted on Kubernetes nodes.

Deprecated: StorageOS is deprecated and the in-tree storageos type is no longer supported.

Type

object

Property	Type	Description
fsType	string	fsType is the filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified.

Property	Type	Description
readOnly	boolean	readOnly defaults to false (read/write). ReadOnly here will force the ReadOnly setting in VolumeMounts.
secretRef	object	secretRef specifies the secret to use for obtaining the StorageOS API credentials. If not specified, default values will be attempted.
volumeName	string	volumeName is the human-readable name of the StorageOS volume. Volume names are only unique within a namespace.
volumeNamespace	string	volumeNamespace specifies the scope of the volume within StorageOS. If no namespace is specified then the Pod's namespace will be used. This allows the Kubernetes name scoping to be mirrored within StorageOS for tighter integration. Set VolumeName to any name to override the default behaviour. Set to "default" if you are not using namespaces within StorageOS. Namespaces that do not pre-exist within StorageOS will be created.

11.1.382. .spec.volumes[].storageos.secretRef

Description

secretRef specifies the secret to use for obtaining the StorageOS API credentials. If not specified, default values will be attempted.

Type

object

Property	Type	Description

Property	Type	Description
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

11.1.383. .spec.volumes[].vsphereVolume

Description

vsphereVolume represents a vSphere volume attached and mounted on kubelets host machine.
 Deprecated: VsphereVolume is deprecated. All operations for the in-tree vsphereVolume type are redirected to the csi.vsphere.vmware.com CSI driver.

Type

object

Required

- **volumePath**

Property	Type	Description
fsType	string	fsType is filesystem type to mount. Must be a filesystem type supported by the host operating system. Ex. "ext4", "xfs", "ntfs". Implicitly inferred to be "ext4" if unspecified.
storagePolicyID	string	storagePolicyID is the storage Policy Based Management (SPBM) profile ID associated with the StoragePolicyName.
storagePolicyName	string	storagePolicyName is the storage Policy Based Management (SPBM) profile name.
volumePath	string	volumePath is the path that identifies vSphere volume vmdk

11.1.384. .spec.web

Description

Defines the configuration of the ThanosRuler web server.

Type

object

Property	Type	Description
httpConfig	object	Defines HTTP parameters for web server.
tlsConfig	object	Defines the TLS parameters for HTTPS.

11.1.385. .spec.web.httpConfig**Description**

Defines HTTP parameters for web server.

Type

object

Property	Type	Description
headers	object	List of headers that can be added to HTTP responses.
http2	boolean	Enable HTTP/2 support. Note that HTTP/2 is only supported with TLS. When TLSConfig is not configured, HTTP/2 will be disabled. Whenever the value of the field changes, a rolling update will be triggered.

11.1.386. .spec.web.httpConfig.headers**Description**

List of headers that can be added to HTTP responses.

Type

object

Property	Type	Description
contentSecurityPolicy	string	Set the Content-Security-Policy header to HTTP responses. Unset if blank.

Property	Type	Description
strictTransportSecurity	string	Set the Strict-Transport-Security header to HTTP responses. Unset if blank. Please make sure that you use this with care as this header might force browsers to load Prometheus and the other applications hosted on the same domain and subdomains over HTTPS. https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/Strict-Transport-Security
xContentTypeOptions	string	Set the X-Content-Type-Options header to HTTP responses. Unset if blank. Accepted value is nosniff. https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-Content-Type-Options
xFrameOptions	string	Set the X-Frame-Options header to HTTP responses. Unset if blank. Accepted values are deny and sameorigin. https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-Frame-Options
xXSSProtection	string	Set the X-XSS-Protection header to all responses. Unset if blank. https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-XSS-Protection

11.1.387. .spec.web.tlsConfig

Description

Defines the TLS parameters for HTTPS.

Type

object

Property	Type	Description

Property	Type	Description
cert	object	Secret or ConfigMap containing the TLS certificate for the web server. Either keySecret or keyFile must be defined. It is mutually exclusive with certFile.
certFile	string	Path to the TLS certificate file in the container for the web server. Either keySecret or keyFile must be defined. It is mutually exclusive with cert.
cipherSuites	array (string)	List of supported cipher suites for TLS versions up to TLS 1.2. If not defined, the Go default cipher suites are used. Available cipher suites are documented in the Go documentation: https://golang.org/pkg/crypto/tls/#pkg-constants
clientAuthType	string	The server policy for client TLS authentication. For more detail on clientAuth options: https://golang.org/pkg/crypto/tls/#ClientAuthType
clientCAFile	string	Path to the CA certificate file for client certificate authentication to the server. It is mutually exclusive with client_ca.
client_ca	object	Secret or ConfigMap containing the CA certificate for client certificate authentication to the server. It is mutually exclusive with clientCAFile.

Property	Type	Description
curvePreferences	array (string)	Elliptic curves that will be used in an ECDHE handshake, in preference order. Available curves are documented in the Go documentation: https://golang.org/pkg/crypto/tls/#CurveID
keyFile	string	Path to the TLS private key file in the container for the web server. If defined, either cert or certFile must be defined. It is mutually exclusive with keySecret.
keySecret	object	Secret containing the TLS private key for the web server. Either cert or certFile must be defined. It is mutually exclusive with keyFile.
maxVersion	string	Maximum TLS version that is acceptable.
minVersion	string	Minimum TLS version that is acceptable.
preferServerCipherSuites	boolean	Controls whether the server selects the client's most preferred cipher suite, or the server's most preferred cipher suite. If true then the server's preference, as expressed in the order of elements in cipherSuites, is used.

11.1.388. .spec.web.tlsConfig.cert

Description

Secret or ConfigMap containing the TLS certificate for the web server.
Either **keySecret** or **keyFile** must be defined.

It is mutually exclusive with **certFile**.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

11.1.389. .spec.web.tlsConfig.cert.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

11.1.390. .spec.web.tlsConfig.cert.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.391. .spec.web.tlsConfig.client_ca

Description

Secret or ConfigMap containing the CA certificate for client certificate authentication to the server. It is mutually exclusive with **clientCAFile**.

Type

object

Property	Type	Description
configMap	object	ConfigMap containing data to use for the targets.
secret	object	Secret containing data to use for the targets.

11.1.392. .spec.web.tlsConfig.client_ca.configMap

Description

ConfigMap containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key to select.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the ConfigMap or its key must be defined

11.1.393. .spec.web.tlsConfig.client_ca.secret

Description

Secret containing data to use for the targets.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.394. .spec.web.tlsConfig.keySecret

Description

Secret containing the TLS private key for the web server.
Either **cert** or **certFile** must be defined.

It is mutually exclusive with **keyFile**.

Type

object

Required

- **key**

Property	Type	Description
key	string	The key of the secret to select from. Must be a valid secret key.
name	string	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	boolean	Specify whether the Secret or its key must be defined

11.1.395. .status

Description

Most recent observed status of the ThanosRuler cluster. Read-only. More info: <https://github.com/kubernetes/community/blob/master/contributors/devel/sig-architecture/api-conventions.md#spec-and-status>

Type

object

Required

- **availableReplicas**
- **paused**
- **replicas**
- **unavailableReplicas**
- **updatedReplicas**

Property	Type	Description
availableReplicas	integer	Total number of available pods (ready for at least minReadySeconds) targeted by this ThanosRuler deployment.
conditions	array	The current state of the ThanosRuler object.
conditions[]	object	Condition represents the state of the resources associated with the Prometheus, Alertmanager or ThanosRuler resource.
paused	boolean	Represents whether any actions on the underlying managed objects are being performed. Only delete actions will be performed.
replicas	integer	Total number of non-terminated pods targeted by this ThanosRuler deployment (their labels match the selector).
unavailableReplicas	integer	Total number of unavailable pods targeted by this ThanosRuler deployment.
updatedReplicas	integer	Total number of non-terminated pods targeted by this ThanosRuler deployment that have the desired version spec.

11.1.396. .status.conditions

Description

The current state of the ThanosRuler object.

Type

array

11.1.397. .status.conditions[]

Description

Condition represents the state of the resources associated with the Prometheus, Alertmanager or ThanosRuler resource.

Type

object

Required

- **lastTransitionTime**
- **status**
- **type**

Property	Type	Description
lastTransitionTime	string	lastTransitionTime is the time of the last update to the current status property.
message	string	Human-readable message indicating details for the condition's last transition.
observedGeneration	integer	ObservedGeneration represents the <code>.metadata.generation</code> that the condition was set based upon. For instance, if <code>.metadata.generation</code> is currently 12, but the <code>.status.conditions[].observedGeneration</code> is 9, the condition is out of date with respect to the current state of the instance.
reason	string	Reason for the condition's last transition.
status	string	Status of the condition.
type	string	Type of the condition being reported.

11.2. API ENDPOINTS

The following API endpoints are available:

- **/apis/monitoring.coreos.com/v1/thanosrulers**
 - **GET**: list objects of kind ThanosRuler
- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/thanosrulers**
 - **DELETE**: delete collection of ThanosRuler
 - **GET**: list objects of kind ThanosRuler
 - **POST**: create a ThanosRuler

- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/thanosrulers/{name}**
 - **DELETE**: delete a ThanosRuler
 - **GET**: read the specified ThanosRuler
 - **PATCH**: partially update the specified ThanosRuler
 - **PUT**: replace the specified ThanosRuler
- **/apis/monitoring.coreos.com/v1/namespaces/{namespace}/thanosrulers/{name}/status**
 - **GET**: read status of the specified ThanosRuler
 - **PATCH**: partially update status of the specified ThanosRuler
 - **PUT**: replace status of the specified ThanosRuler

11.2.1. /apis/monitoring.coreos.com/v1/thanosrulers

HTTP method

GET

Description

list objects of kind ThanosRuler

Table 11.1. HTTP responses

HTTP code	Reponse body
200 - OK	ThanosRulerList schema
401 - Unauthorized	Empty

11.2.2. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/thanosrulers

HTTP method

DELETE

Description

delete collection of ThanosRuler

Table 11.2. HTTP responses

HTTP code	Reponse body
200 - OK	Status schema
401 - Unauthorized	Empty

HTTP method

GET**Description**

list objects of kind ThanosRuler

Table 11.3. HTTP responses

HTTP code	Response body
200 - OK	ThanosRulerList schema
401 - Unauthorized	Empty

HTTP method**POST****Description**

create a ThanosRuler

Table 11.4. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 11.5. Body parameters

Parameter	Type	Description
body	ThanosRuler schema	

Table 11.6. HTTP responses

HTTP code	Reponse body
200 - OK	ThanosRuler schema
201 - Created	ThanosRuler schema
202 - Accepted	ThanosRuler schema
401 - Unauthorized	Empty

11.2.3. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/thanosrulers/{nam

Table 11.7. Global path parameters

Parameter	Type	Description
name	string	name of the ThanosRuler

HTTP method

DELETE

Description

delete a ThanosRuler

Table 11.8. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Table 11.9. HTTP responses

HTTP code	Reponse body
200 - OK	Status schema

HTTP code	Reponse body
202 - Accepted	Status schema
401 - Unauthorized	Empty

HTTP method**GET****Description**

read the specified ThanosRuler

Table 11.10. HTTP responses

HTTP code	Reponse body
200 - OK	ThanosRuler schema
401 - Unauthorized	Empty

HTTP method**PATCH****Description**

partially update the specified ThanosRuler

Table 11.11. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Parameter	Type	Description
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 11.12. HTTP responses

HTTP code	Response body
200 - OK	ThanosRuler schema
401 - Unauthorized	Empty

HTTP method**PUT****Description**

replace the specified ThanosRuler

Table 11.13. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Parameter	Type	Description
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 11.14. Body parameters

Parameter	Type	Description
body	ThanosRuler schema	

Table 11.15. HTTP responses

HTTP code	Response body
200 - OK	ThanosRuler schema
201 - Created	ThanosRuler schema
401 - Unauthorized	Empty

11.2.4. /apis/monitoring.coreos.com/v1/namespaces/{namespace}/thanosrulers/{name}

Table 11.16. Global path parameters

Parameter	Type	Description
name	string	name of the ThanosRuler

HTTP method

GET

Description

read status of the specified ThanosRuler

Table 11.17. HTTP responses

HTTP code	Response body
200 - OK	ThanosRuler schema
401 - Unauthorized	Empty

HTTP method**PATCH****Description**

partially update status of the specified ThanosRuler

Table 11.18. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 11.19. HTTP responses

HTTP code	Response body
200 - OK	ThanosRuler schema
401 - Unauthorized	Empty

HTTP method**PUT****Description**

replace status of the specified ThanosRuler

Table 11.20. Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
fieldValidation	string	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Table 11.21. Body parameters

Parameter	Type	Description
body	ThanosRuler schema	

Table 11.22. HTTP responses

HTTP code	Reponse body
200 - OK	ThanosRuler schema
201 - Created	ThanosRuler schema
401 - Unauthorized	Empty

CHAPTER 12. NODEMETRICS [METRICS.K8S.IO/V1BETA1]

Description

NodeMetrics sets resource usage metrics of a node.

Type

object

Required

- **timestamp**
- **window**
- **usage**

12.1. SPECIFICATION

Property	Type	Description
apiVersion	string	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	string	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	ObjectMeta	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Property	Type	Description
timestamp	Time	The following fields define time interval from which metrics were collected from the interval [Timestamp-Window, Timestamp].
usage	object (Quantity)	The memory usage is the memory working set.
window	Duration	

12.2. API ENDPOINTS

The following API endpoints are available:

- **/apis/metrics.k8s.io/v1beta1/nodes**
 - **GET**: list objects of kind NodeMetrics
- **/apis/metrics.k8s.io/v1beta1/nodes/{name}**
 - **GET**: read the specified NodeMetrics

12.2.1. /apis/metrics.k8s.io/v1beta1/nodes

HTTP method

GET

Description

list objects of kind NodeMetrics

Table 12.1. HTTP responses

HTTP code	Reponse body
200 - OK	NodeMetricsList schema

12.2.2. /apis/metrics.k8s.io/v1beta1/nodes/{name}

Table 12.2. Global path parameters

Parameter	Type	Description
name	string	name of the NodeMetrics

HTTP method

GET

Description

read the specified NodeMetrics

Table 12.3. HTTP responses

HTTP code	Reponse body
200 - OK	NodeMetrics schema

CHAPTER 13. PODMETRICS [METRICS.K8S.IO/V1BETA1]

Description

PodMetrics sets resource usage metrics of a pod.

Type

object

Required

- **timestamp**
- **window**
- **containers**

13.1. SPECIFICATION

Property	Type	Description
apiVersion	string	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
containers	array	Metrics for all containers are collected within the same time window.
containers[]	object	ContainerMetrics sets resource usage metrics of a container.
kind	string	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds

Property	Type	Description
metadata	ObjectMeta	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
timestamp	Time	The following fields define time interval from which metrics were collected from the interval [Timestamp-Window, Timestamp].
window	Duration	

13.1.1. .containers

Description

Metrics for all containers are collected within the same time window.

Type

array

13.1.2. .containers[]

Description

ContainerMetrics sets resource usage metrics of a container.

Type

object

Required

- **name**
- **usage**

Property	Type	Description
name	string	Container name corresponding to the one from pod.spec.containers.
usage	object (Quantity)	The memory usage is the memory working set.

13.2. API ENDPOINTS

The following API endpoints are available:

- **/apis/metrics.k8s.io/v1beta1/pods**
 - **GET**: list objects of kind PodMetrics
- **/apis/metrics.k8s.io/v1beta1/namespaces/{namespace}/pods**
 - **GET**: list objects of kind PodMetrics
- **/apis/metrics.k8s.io/v1beta1/namespaces/{namespace}/pods/{name}**
 - **GET**: read the specified PodMetrics

13.2.1. /apis/metrics.k8s.io/v1beta1/pods

HTTP method

GET

Description

list objects of kind PodMetrics

Table 13.1. HTTP responses

HTTP code	Reponse body
200 - OK	PodMetricsList schema

13.2.2. /apis/metrics.k8s.io/v1beta1/namespaces/{namespace}/pods

HTTP method

GET

Description

list objects of kind PodMetrics

Table 13.2. HTTP responses

HTTP code	Reponse body
200 - OK	PodMetricsList schema

13.2.3. /apis/metrics.k8s.io/v1beta1/namespaces/{namespace}/pods/{name}

Table 13.3. Global path parameters

Parameter	Type	Description
name	string	name of the PodMetrics

HTTP method

GET

Description

read the specified PodMetrics

Table 13.4. HTTP responses

HTTP code	Reponse body
200 - OK	PodMetrics schema