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Valkey APIs

Valkey

User

Valkey

`Valkey` is the high-level namespaced API for creating and operating an instance. For product 2.0.0, use only `7.2`, `8.1`, or `9.1` in `spec.version`, even though the compatibility schema below also lists legacy enum values.

`spec.replicas.replicasOfShard` is implemented as the total member count per Cluster shard or the total data-member count for Failover/Replica.

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Main specification fields

Field	Purpose	2.0.0 boundary
<code>spec.version</code>	Desired server line	Product supports only <code>7.2</code> , <code>8.1</code> , and <code>9.1</code> .

Field	Purpose	2.0.0 boundary
<code>spec.arch</code>	Deployment architecture	<code>cluster</code> , <code>failover</code> , or <code>replica</code> .
<code>spec.replicas</code>	Shard and member counts; optional initial slot plan	<code>shardsConfig</code> is consumed during Cluster initialization.
<code>spec.resources</code>	Data-container CPU and memory	CPU and memory are required by the webhook.
<code>spec.customConfigs</code>	Valkey configuration directives	Operator-owned directives are filtered; some changes require restart.
<code>spec.modules</code>	Startup module path and arguments	The Operator only renders <code>loadmodule</code> . Standard inspected images contain no module files, and this API has no image override; use only a product-delivered and validated module.
<code>spec.storage</code>	Persistent volume claim (PVC) capacity, class, and annotations	The schema accepts an access mode, but generated PVCs always request <code>ReadWriteOnce</code> . In the inspected baseline, <code>retainAfterDeleted</code> has no effect and generated PVCs remain after deletion; review them explicitly.
<code>spec.access</code>	Service type, annotations, Internet Protocol (IP) family, fixed ports, and TLS issuer	Leave fixed <code>ports</code> unset unless the delivered build resolves the documented format conflict.
<code>spec.podAnnotations</code>	Data-workload annotations and lifecycle triggers	Pause and restart use reserved annotation keys documented in the guides.
<code>spec.affinityPolicy</code>	Built-in placement policy	Cluster <code>AntiAffinity</code> is shard-local in the implementation, and the <code>CustomAffinity</code> literal does not

Field	Purpose	2.0.0 boundary
		activate the Cluster builder's custom-affinity branch.
<code>spec.nodeSelector</code>	Node label selection	Standard Kubernetes selector semantics.
<code>spec.tolerations</code>	Pod tolerations	Standard Kubernetes toleration semantics.
<code>spec.securityContext</code>	Pod security context	Applied to data workloads.
<code>spec.exporter</code>	Exporter enablement and container settings	Enabled unless <code>disable: true</code> .
<code>spec.sentinel</code>	Failover Sentinel settings or reference	Cleared for Replica architecture; required for Failover after defaulting.

Status fields

Field	Meaning
<code>status.phase</code>	<code>Initializing</code> , <code>Rebalancing</code> , <code>Ready</code> , <code>Failed</code> , or <code>Paused</code> .
<code>status.message</code>	Current reconciliation or failure detail.
<code>status.matchLabels</code>	Labels that identify managed resources.
<code>status.nodes</code>	Observed Pod, role, address, member, and slot information.
<code>status.lastShardCount</code>	Last shard count recorded by high-level reconciliation; verify child resources and Pods for actual topology.
<code>status.lastVersion</code>	Last desired version recorded by high-level reconciliation; verify every Pod image and <code>INFO server</code> for the runtime version.

Description

Valkey is the Schema for the valkeys API

Type

object

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 ↗	ObjectMeta is metadata that all persisted resources must have, which includes all objects users must create.
spec	object	ValkeySpec defines the desired state of Valkey
status	object	ValkeyStatus defines the observed state of Valkey

.spec

Description

ValkeySpec defines the desired state of Valkey

Type

object

Required

arch

replicas

resources

version

Property	Type	Description
<code>access</code>	<code>object</code>	Access defines information for Valkey nodePorts settings
<code>affinityPolicy</code>	<code>string</code>	AffinityPolicy specifies the affinity policy for the Pod
<code>arch</code>	<code>string</code>	Arch supports cluster, sentinel
<code>customAffinity</code>	<code>object</code>	CustomAffinity specifies the custom affinity settings for the Pod if AffinityPolicy is set to CustomAffinity, this field is required
<code>customConfigs</code>	<code>object</code>	CustomConfigs defines the configuration settings for Valkey for detailed settings, please refer to https://github.com/valkey-io/valkey/blob/unstable/valkey.conf ↗

Property	Type	Description
<code>exporter</code>	<code>object</code>	Exporter defines Valkey exporter settings
<code>modules</code>	<code>array</code>	Modules defines a list of modules to be loaded into the valkey instance. Each module is specified by its name and version. Modules are loaded at startup and can extend Redis functionality.
<code>nodeSelector</code>	<code>object</code>	NodeSelector specifies the node selector for the Pod
<code>podAnnotations</code>	<code>object</code>	PodAnnotations holds Kubernetes Pod annotations PodAnnotations
<code>replicas</code>	<code>object</code>	Replicas defines desired number of replicas for Valkey
<code>resources</code>	<code>object</code>	Resources for setting resource requirements for the Pod Resources *v1.ResourceRequirements
<code>securityContext</code>	<code>object</code>	SecurityContext sets security attributes for the Pod SecurityContext
<code>sentinel</code>	<code>object</code>	Sentinel defines Sentinel configuration settings Sentinel

Property	Type	Description
<code>storage</code>	<code>object</code>	Storage defines the storage settings for Valkey
<code>tolerations</code>	<code>array</code>	tolerations defines tolerations for the Pod
<code>version</code>	<code>string</code>	Version specifies the Valkey version to deploy. Supported: 7.2, 8.1, 9.1 — the versions images are published for and which the test matrix covers. The enum also accepts 8.0 and 9.0, but no image is shipped for either: with no entry in VALKEY_VERSION_MAP they resolve to a bare <code>:8.0</code> / <code>:9.0</code> tag, so they are usable only with a self-supplied image and are neither supported nor tested.

.spec.access

Description

Access defines information for Valkey nodePorts settings

Type

`object`

Property	Type	Description
<code>annotations</code>	<code>object</code>	The annnotations of the service which will be attached to services
<code>certIssuer</code>	<code>string</code>	Cert Issuer for external access TLS certificate

Property	Type	Description
<code>certIssuerType</code>	<code>string</code>	Cert Issuer Type for external access TLS certificate
<code>enableTLS</code>	<code>boolean</code>	EnableTLS enable TLS for external access
<code>ipFamilyPrefer</code>	<code>string</code>	IPFamily represents the IP Family (IPv4 or IPv6). This type is used to express the family of an IP expressed by a type (e.g. service.spec.ipFamilies).
<code>ports</code>	<code>string</code>	Ports defines the nodeports of NodePort service
<code>serviceType</code>	<code>string</code>	ServiceType defines the type of the all related services

.spec.access.annotations

Description

The annotations of the service which will be attached to services

Type

`object`

.spec.customAffinity

Description

CustomAffinity specifies the custom affinity settings for the Pod if AffinityPolicy is set to CustomAffinity, this field is required

Type

`object`

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

`.spec.customAffinity.nodeAffinity`

Description

Describes node affinity scheduling rules for the pod.

Type

`object`

Property	Type	Description
<code>preferredDuringSchedulingIgnoredDuringExecution</code>	<code>array</code>	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

Property	Type	Description
		node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of scheduling requirements (resource request, requiredDuringScheduling affinity expressions, etc.) compute a sum by iterating through the elements of this field 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
<code>requiredDuringSchedulingIgnoredDuringExecution</code>	<code>object</code>	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 node update), the system may or may not try to eventually evict the pod from its node.

`.spec.customAffinity.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`

`.spec.customAffinity.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.

`.spec.customAffinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference`

Description

A node selector term, associated with the corresponding weight.

Type

object

Property	Type	Description
<code>matchExpressions</code>	<code>array</code>	A list of node selector requirements by node's labels.
<code>matchFields</code>	<code>array</code>	A list of node selector requirements by node's fields.

`.spec.customAffinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchExpressions`

Description

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

Type

`array`

`.spec.customAffinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchExpressions[]`

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	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.

.spec.customAffinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchExpressions[].values

Description

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.

Type

array

.spec.customAffinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchExpressions

ns[].values[]

Type

string

.spec.customAffinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchFields

Description

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

Type

array

.spec.customAffinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchFields[]

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
<code>operator</code>	<code>string</code>	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist, Gt, and Lt.
<code>values</code>	<code>array</code>	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.

`.spec.customAffinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchFields[].values`

Description

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.

Type

`array`

`.spec.customAffinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchFields[].values[]`

Type

`string`

`.spec.customAffinity.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
<code>nodeSelectorTerms</code>	<code>array</code>	Required. A list of node selector terms. The terms are ORed.

`.spec.customAffinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms`

Description

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

Type

`array`

`.spec.customAffinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[]`

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
<code>matchExpressions</code>	array	A list of node selector requirements by node's labels.
<code>matchFields</code>	array	A list of node selector requirements by node's fields.

`.spec.customAffinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matchExpressions`

Description

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

Type

array

`.spec.customAffinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matchExpressions[]`

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	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.

.spec.customAffinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matchExpressions[].values

Description

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.

Type

array

.spec.customAffinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matchExpressions[].values[]

Type

string

.spec.customAffinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matchFieldIds

Description

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

Type

array

.spec.customAffinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matchFieldIds[]

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	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.

.spec.customAffinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matchFields[].values

Description

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.

Type

array

.spec.customAffinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matchFields[].values

Ids[].values[]

Type

`string`

.spec.customAffinity.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
<code>preferredDuringSchedulingIgnoredDuringExecution</code>	<code>array</code>	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 v the greatest sum of weights, i.e. for each node that meets all o scheduling requireme (resource request, requiredDuringSched affinity expressions, € compute a sum by iterating through the elements of this field

Property	Type	Description
		adding "weight" to the sum if the node has p which matches the corresponding podAffinityTerm; the node(s) with the high sum are the most preferred.
<code>requiredDuringSchedulingIgnoredDuringExecution</code>	<code>array</code>	If the affinity requirem specified by this field not met at scheduling time, the pod will not scheduled onto the n If the affinity requirem specified by this field cease to be met at sc point during pod execution (e.g. due to pod label update), the system may or may r try to eventually evict pod from its node. Wl there are multiple elements, the lists of nodes corresponding each podAffinityTerm intersected, i.e. all ter must be satisfied.

`.spec.customAffinity.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`

`.spec.customAffinity.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
<code>podAffinityTerm</code>	<code>object</code>	Required. A pod affinity term, associated with the corresponding weight.

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

`.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm`

Description

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

Type

`object`

Required

`topologyKey`

Property	Type	Description
<code>labelSelector</code>	<code>object</code>	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.
<code>matchLabelKeys</code>	<code>array</code>	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 <code>labelSelector</code> as <code>key in (value)</code> 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.

Property	Type	Description
		The same key is forbidden to exist in both <code>matchLabelKeys</code> and <code>labelSelector</code> . Also, <code>matchLabelKeys</code> cannot be set when <code>labelSelector</code> isn't set.
<code>mismatchLabelKeys</code>	array	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 <code>labelSelector</code> as <code>key notin (value)</code> 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 <code>mismatchLabelKeys</code> and <code>labelSelector</code>. Also, <code>mismatchLabelKeys</code> cannot be set when <code>labelSelector</code> isn't set.
<code>namespaceSelector</code>	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 (<code>{}</code>) matches all namespaces.
<code>namespaces</code>	array	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 <code>namespaceSelector</code>. null

Property	Type	Description
		or empty namespaces list and null namespaceSelector means "this pod's namespace".
<code>topologyKey</code>	<code>string</code>	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.

`.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector`

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
<code>matchExpressions</code>	<code>array</code>	matchExpressions is a list of label selector requirements. The requirements are ANDed.
<code>matchLabels</code>	<code>object</code>	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

Property	Type	Description
		"key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

`.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector.matchExpressions`

Description

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

Type

array

`.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.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
<code>key</code>	<code>string</code>	key is the label key that the selector applies to.

Property	Type	Description
<code>operator</code>	<code>string</code>	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
<code>values</code>	<code>array</code>	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.

`.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector.matchExpressions[].values`

Description

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.

Type

`array`

`.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector.matchExpressions[].values[]`

Type

`string`

.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector.matchLabels

Description

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.

Type

object

.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.matchLabelKeys

Description

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.

Type

array

.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.matchLabelKeys[]

Type

`string`

.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.mismatchLabelKeys

Description

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.

Type

`array`

.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.mismatchLabelKeys[]

Type

`string`

.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaceSelector

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.
matchLabels	object	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.

.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaceSelector.matchExpressions

Description

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

Type

array

.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaceSelector.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	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.

.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaceSelector.matchExpressions[].values

Description

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.

Type

array

.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaceSelector.matchExpressions[].values[]

Type

string

.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaceSelector.matchLabels

Description

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.

Type

object

.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaces

Description

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".

Type

array

.spec.customAffinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaces



Type

string

.spec.customAffinity.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

.spec.customAffinity.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
<code>labelSelector</code>	<code>object</code>	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.
<code>matchLabelKeys</code>	<code>array</code>	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 <code>labelSelector</code> as <code>key in (value)</code> 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 <code>matchLabelKeys</code> and <code>labelSelector</code>. Also, <code>matchLabelKeys</code> cannot be set when <code>labelSelector</code> isn't set.

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

`.spec.customAffinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector`

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
<code>matchExpressions</code>	<code>array</code>	<code>matchExpressions</code> is a list of label selector requirements. The requirements are ANDed.
<code>matchLabels</code>	<code>object</code>	<code>matchLabels</code> is a map of {key,value} pairs. A single {key,value} in the <code>matchLabels</code> map is equivalent to an element of <code>matchExpressions</code> , whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

`.spec.customAffinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExpressions`

Description

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

Type

array

`.spec.customAffinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].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
<code>key</code>	<code>string</code>	key is the label key that the selector applies to.
<code>operator</code>	<code>string</code>	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
<code>values</code>	<code>array</code>	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.

`.spec.customAffinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExpressions[].values`

Description

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.

Type

`array`

`.spec.customAffinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExpressions[].values[]`

Type

`string`

`.spec.customAffinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchLabels`

Description

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.

Type

object

.spec.customAffinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].matchLabelKeys

Description

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.

Type

array

.spec.customAffinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].matchLabelKeys[]

Type

string

.spec.customAffinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].mismatchLabelKeys

Description

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.

Type

array

`.spec.customAffinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].mismatchLabelKeys[]`

Type

string

`.spec.customAffinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector`

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
<code>matchExpressions</code>	array	<code>matchExpressions</code> is a list of label selector requirements. The requirements are ANDed.
<code>matchLabels</code>	object	<code>matchLabels</code> is a map of {key,value} pairs. A single {key,value} in the <code>matchLabels</code> map is equivalent to an element of <code>matchExpressions</code> , whose key field is

Property	Type	Description
		"key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

`.spec.customAffinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.matchExpressions`

Description

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

Type

array

`.spec.customAffinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.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
<code>operator</code>	<code>string</code>	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
<code>values</code>	<code>array</code>	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.

`.spec.customAffinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.matchExpressions[].values`

Description

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.

Type

`array`

`.spec.customAffinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.matchExpressions[].values[]`

Type

`string`

.spec.customAffinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.matchLabels

Description

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.

Type

object

.spec.customAffinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaces

Description

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".

Type

array

.spec.customAffinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaces[]

Type

string

.spec.customAffinity.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
<code>preferredDuringSchedulingIgnoredDuringExecution</code>	<code>array</code>	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expression specified by this field. 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 expression 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.
<code>requiredDuringSchedulingIgnoredDuringExecution</code>	<code>array</code>	If the anti-affinity requirements specified in this field are not met by a node, the pod will not be scheduled time, the pod will not be scheduled.

Property	Type	Description
		will not be scheduled 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 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 intersected, i.e. all terms must be satisfied.

`.spec.customAffinity.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 subtracting "weight" from 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

`.spec.customAffinity.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
<code>podAffinityTerm</code>	<code>object</code>	Required. A pod affinity term, associated with the corresponding weight.
<code>weight</code>	<code>integer</code>	weight associated with matching the corresponding <code>podAffinityTerm</code> , in the range 1-100.

`.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm`

Description

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

Type

`object`

Required

`topologyKey`

Property	Type	Description
<code>labelSelector</code>	<code>object</code>	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.
<code>matchLabelKeys</code>	<code>array</code>	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 <code>labelSelector</code> as <code>key in (value)</code> 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 <code>matchLabelKeys</code> and <code>labelSelector</code>. Also, <code>matchLabelKeys</code> cannot be set when <code>labelSelector</code> isn't set.

Property	Type	Description
<code>mismatchLabelKeys</code>	<code>array</code>	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 <code>labelSelector</code> as <code>key notin (value)</code> 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.
<code>namespaceSelector</code>	<code>object</code>	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.
<code>namespaces</code>	<code>array</code>	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
<code>topologyKey</code>	<code>string</code>	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.

`.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector`

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
<code>matchExpressions</code>	<code>array</code>	matchExpressions is a list of label selector requirements. The requirements are ANDed.
<code>matchLabels</code>	<code>object</code>	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.

`.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector.matchExpressions`

Description

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

Type

array

`.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.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
<code>key</code>	<code>string</code>	key is the label key that the selector applies to.
<code>operator</code>	<code>string</code>	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
<code>values</code>	<code>array</code>	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.

`.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector.matchExpressions[].values`

Description

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.

Type

`array`

`.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector.matchExpressions[].values[]`

Type

`string`

`.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector.matchLabels`

Description

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.

Type

object

.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.matchLabelKeys

Description

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.

Type

array

.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.matchLabelKeys[]

Type

string

.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.mismatchLabelKeys

Description

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.

Type

array

.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.mismatchLabelKeys[]

Type

string

.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaceSelector

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
<code>matchExpressions</code>	<code>array</code>	<code>matchExpressions</code> is a list of label selector requirements. The requirements are ANDed.
<code>matchLabels</code>	<code>object</code>	<code>matchLabels</code> is a map of {key,value} pairs. A single {key,value} in the <code>matchLabels</code> map is equivalent to an element of <code>matchExpressions</code> , whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

`.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaceSelector.matchExpressions`

Description

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

Type

`array`

`.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaceSelector.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	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.

.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaceSelector.matchExpressions[].values

Description

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.

Type

array

.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespace

namespaceSelector.matchExpressions[].values[]

Type

string

.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaceSelector.matchLabels

Description

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.

Type

object

.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaces

Description

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".

Type

array

.spec.customAffinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaces[]

Type

string

.spec.customAffinity.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

.spec.customAffinity.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
<code>labelSelector</code>	<code>object</code>	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.
<code>matchLabelKeys</code>	<code>array</code>	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 <code>labelSelector</code> as <code>key in (value)</code> 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 <code>matchLabelKeys</code> and <code>labelSelector</code>. Also, <code>matchLabelKeys</code> cannot be set when <code>labelSelector</code> isn't set.

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

`.spec.customAffinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector`

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
<code>matchExpressions</code>	<code>array</code>	<code>matchExpressions</code> is a list of label selector requirements. The requirements are ANDed.
<code>matchLabels</code>	<code>object</code>	<code>matchLabels</code> is a map of {key,value} pairs. A single {key,value} in the <code>matchLabels</code> map is equivalent to an element of <code>matchExpressions</code> , whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

`.spec.customAffinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExpressions`

Description

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

Type

array

`.spec.customAffinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].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
<code>key</code>	<code>string</code>	key is the label key that the selector applies to.
<code>operator</code>	<code>string</code>	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
<code>values</code>	<code>array</code>	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.

`.spec.customAffinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExpressions[].values`

Description

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.

Type

`array`

`.spec.customAffinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExpressions[].values[]`

Type

`string`

`.spec.customAffinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchLabels`

Description

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.

Type

object

.spec.customAffinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].matchLabelKeys

Description

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.

Type

array

.spec.customAffinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].matchLabelKeys[]

Type

string

.spec.customAffinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].mismatchLabelKeys

Description

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.

Type

array

`.spec.customAffinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].mismatchLabelKeys[]`

Type

string

`.spec.customAffinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector`

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
<code>matchExpressions</code>	array	<code>matchExpressions</code> is a list of label selector requirements. The requirements are ANDed.
<code>matchLabels</code>	object	<code>matchLabels</code> is a map of {key,value} pairs. A single {key,value} in the <code>matchLabels</code> map is equivalent to an element of <code>matchExpressions</code> , whose key field is

Property	Type	Description
		"key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

`.spec.customAffinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.matchExpressions`

Description

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

Type

array

`.spec.customAffinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.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
<code>key</code>	<code>string</code>	key is the label key that the selector applies to.

Property	Type	Description
<code>operator</code>	<code>string</code>	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
<code>values</code>	<code>array</code>	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.

`.spec.customAffinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.matchExpressions[].values`

Description

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.

Type

`array`

`.spec.customAffinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.matchExpressions[].values[]`

Type

`string`

.spec.customAffinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.matchLabels

Description

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.

Type

object

.spec.customAffinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaces

Description

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".

Type

array

.spec.customAffinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaces[]

Type

string

.spec.customConfigs

Description

CustomConfigs defines the configuration settings for Valkey for detailed settings, please refer to <https://github.com/valkey-io/valkey/blob/unstable/valkey.conf>

Type

object

.spec.exporter

Description

Exporter defines Valkey exporter settings

Type

object

Property	Type	Description
<code>disable</code>	<code>boolean</code>	Disable disable exporter
<code>image</code>	<code>string</code>	Image the exporter image
<code>imagePullPolicy</code>	<code>string</code>	ImagePullPolicy
<code>resources</code>	<code>object</code>	Resources for setting resource requirements for the Pod Resources *v1.ResourceRequirements
<code>securityContext</code>	<code>object</code>	SecurityContext for setting security context for the Pod SecurityContext *corev1.SecurityContext

.spec.exporter.resources

Description

Resources for setting resource requirements for the Pod Resources

*v1.ResourceRequirements

Type

object

Property	Type	Description
		Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container.
claims	array	This field depends on the DynamicResourceAllocation feature gate. This field is immutable. It can only be set for containers.
limits	object	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/ ↗
requests	object	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/ ↗

.spec.exporter.resources.claims

Description

Claims lists the names of resources, defined in `spec.resourceClaims`, that are used by this container. This field depends on the `DynamicResourceAllocation` feature gate. This field is immutable. It can only be set for containers.

Type

array

`.spec.exporter.resources.claims[]`

Description

ResourceClaim references one entry in `PodSpec.ResourceClaims`.

Type

object

Required

name

Property	Type	Description
<code>name</code>	<code>string</code>	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.
<code>request</code>	<code>string</code>	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.

`.spec.exporter.resources.limits`

Description

Limits describes the maximum amount of compute resources allowed. More info: <https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/>

Type

object

.spec.exporter.resources.requests

Description

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/>

Type

object

.spec.exporter.securityContext

Description

SecurityContext for setting security context for the Pod SecurityContext

*corev1.SecurityContext

Type

object

Property	Type	Description
<code>allowPrivilegeEscalation</code>	<code>boolean</code>	AllowPrivilegeEscalation controls whether a process can gain more privileges than its parent process. This bool directly controls if the <code>no_new_privs</code> flag will be set on the container process. AllowPrivilegeEscalation is true always when the container is: - run as Privileged - has <code>CAP_SYS_ADMIN</code> Note that this field cannot be set when <code>spec.os.name</code> is windows.

Property	Type	Description
<code>appArmorProfile</code>	<code>object</code>	<code>appArmorProfile</code> is the AppArmor options to use by this container. If set, this profile overrides the pod's <code>appArmorProfile</code> . Note that this field cannot be set when <code>spec.os.name</code> is <code>windows</code> .
<code>capabilities</code>	<code>object</code>	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 <code>spec.os.name</code> is <code>windows</code> .
<code>privileged</code>	<code>boolean</code>	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 <code>spec.os.name</code> is <code>windows</code> .
<code>procMount</code>	<code>string</code>	<code>procMount</code> denotes the type of proc mount to use for the containers. The default value is <code>Default</code> which uses the container runtime defaults for readonly paths and masked paths. Note that this field cannot be set when <code>spec.os.name</code> is <code>windows</code> .

Property	Type	Description
<code>readOnlyRootFilesystem</code>	<code>boolean</code>	Whether this container has a read-only root filesystem. Default is false. Note that this field cannot be set when <code>spec.os.name</code> is <code>windows</code> .
<code>runAsGroup</code>	<code>integer</code>	The GID to run the entrypoint of the container process. Uses runtime default if unset. May also be set in <code>PodSecurityContext</code> . If set in both <code>SecurityContext</code> and <code>PodSecurityContext</code> , the value specified in <code>SecurityContext</code> takes precedence. Note that this field cannot be set when <code>spec.os.name</code> is <code>windows</code> .
<code>runAsNonRoot</code>	<code>boolean</code>	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 <code>PodSecurityContext</code> . If set in both <code>SecurityContext</code> and <code>PodSecurityContext</code> , the value specified in <code>SecurityContext</code> takes precedence.
<code>runAsUser</code>	<code>integer</code>	The UID to run the entrypoint of the container process. Defaults to user specified in image metadata if unspecified. May also be set in <code>PodSecurityContext</code> . If set in both <code>SecurityContext</code> and

Property	Type	Description
		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.

`.spec.exporter.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
<code>localhostProfile</code>	<code>string</code>	<code>localhostProfile</code> 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 <code>type</code> is <code>"Localhost"</code> .
<code>type</code>	<code>string</code>	<code>type</code> indicates which kind of AppArmor profile will be applied. Valid options are: <code>Localhost</code> - a profile pre-loaded on the node. <code>RuntimeDefault</code> - the container runtime's default profile. <code>Unconfined</code> - no AppArmor enforcement.

`.spec.exporter.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
<code>add</code>	<code>array</code>	Added capabilities
<code>drop</code>	<code>array</code>	Removed capabilities

.spec.exporter.securityContext.capabilities.add**Description**

Added capabilities

Type`array`**.spec.exporter.securityContext.capabilities.add[]****Description**

Capability represent POSIX capabilities type

Type`string`**.spec.exporter.securityContext.capabilities.drop****Description**

Removed capabilities

Type`array`

.spec.exporter.securityContext.capabilities.drop[]

Description

Capability represent POSIX capabilities type

Type

string

.spec.exporter.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.

.spec.exporter.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.
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.

.spec.exporter.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
<code>gmsaCredentialSpec</code>	<code>string</code>	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.
<code>gmsaCredentialSpecName</code>	<code>string</code>	GMSACredentialSpecName is the name of the GMSA credential spec to use.
<code>hostProcess</code>	<code>boolean</code>	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.
<code>runAsUserName</code>	<code>string</code>	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

Property	Type	Description
		PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.

.spec.modules

Description

Modules defines a list of modules to be loaded into the valkey instance. Each module is specified by its name and version. Modules are loaded at startup and can extend Redis functionality.

Type

array

.spec.modules[]

Description

ValkeyModule defines the module for Valkey

Type

object

Required

path

Property	Type	Description
args	array	Args args for module Supported for valkey 8.0+

Property	Type	Description
		Path path of valkey module.
<code>path</code>	<code>string</code>	.so suffix will be appended if path not suffixed provided if path is a full path, the full path will be used else the module will be loaded from /usr/local/valkey/modules

`.spec.modules[].args`

Description

Args args for module Supported for valkey 8.0+

Type

`array`

`.spec.modules[].args[]`

Type

`string`

`.spec.nodeSelector`

Description

NodeSelector specifies the node selector for the Pod

Type

`object`

`.spec.podAnnotations`

Description

PodAnnotations holds Kubernetes Pod annotations PodAnnotations

Type`object`

.spec.replicas

Description

Replicas defines desired number of replicas for Valkey

Type`object`**Required**`replicasOfShard`

Property	Type	Description
<code>replicasOfShard</code>	<code>integer</code>	ReplicasOfShard is the number of replicas for each master node
<code>shards</code>	<code>integer</code>	Shards defines the number of shards for Valkey for cluster arch, the default value is 3; for other arch, the value is always 1
<code>shardsConfig</code>	<code>array</code>	ShardsConfig is the configuration of each shard

.spec.replicas.shardsConfig

Description

ShardsConfig is the configuration of each shard

Type`array`

.spec.replicas.shardsConfig[]

Type

object

Property	Type	Description
slots	string	Slots is the slot range for the shard, eg: 0-1000,1002,1005-1100

.spec.resources

Description

Resources for setting resource requirements for the Pod Resources

*v1.ResourceRequirements

Type

object

Property	Type	Description
claims	array	Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This field depends on the DynamicResourceAllocation feature gate. This field is immutable. It can only be set for containers.

Property	Type	Description
<code>limits</code>	<code>object</code>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/ ↗
<code>requests</code>	<code>object</code>	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/ ↗

`.spec.resources.claims`

Description

Claims lists the names of resources, defined in `spec.resourceClaims`, that are used by this container. This field depends on the `DynamicResourceAllocation` feature gate. This field is immutable. It can only be set for containers.

Type

`array`

`.spec.resources.claims[]`

Description

ResourceClaim references one entry in `PodSpec.ResourceClaims`.

Type

`object`

Required

`name`

Property	Type	Description
<code>name</code>	<code>string</code>	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.
<code>request</code>	<code>string</code>	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.

`.spec.resources.limits`

Description

Limits describes the maximum amount of compute resources allowed. More info: <https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/>

Type

`object`

`.spec.resources.requests`

Description

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/>

Type

`object`

`.spec.securityContext`

Description

SecurityContext sets security attributes for the Pod SecurityContext

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

Property	Type	Description
		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.
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

Property	Type	Description
		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.
<code>seLinuxChangePolicy</code>	<code>string</code>	<code>seLinuxChangePolicy</code> 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 <code>-o context</code> 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 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.

Property	Type	Description
		"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 seLinuxChangePolicy, otherwise some pods can get stuck in ContainerCreating state. Note that this field cannot be set when spec.os.name 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 spec.os.name is windows.

Property	Type	Description
<code>seccompProfile</code>	<code>object</code>	The seccomp options to use by the containers in this pod. Note that this field cannot be set when spec.os.name is windows.
<code>supplementalGroups</code>	<code>array</code>	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.

Property	Type	Description
<code>supplementalGroupsPolicy</code>	<code>string</code>	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.
<code>sysctls</code>	<code>array</code>	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.
<code>windowsOptions</code>	<code>object</code>	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.

`.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.

.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
<code>level</code>	<code>string</code>	Level is SELinux level label that applies to the container.
<code>role</code>	<code>string</code>	Role is a SELinux role label that applies to the container.
<code>type</code>	<code>string</code>	Type is a SELinux type label that applies to the container.
<code>user</code>	<code>string</code>	User is a SELinux user label that applies to the container.

`.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
<code>localhostProfile</code>	<code>string</code>	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.
<code>type</code>	<code>string</code>	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.

`.spec.securityContext.supplementalGroups`

Description

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.

Type

`array`

`.spec.securityContext.supplementalGroups[]`

Type

integer

.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

.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

.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
<code>gmsaCredentialSpec</code>	<code>string</code>	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.
<code>gmsaCredentialSpecName</code>	<code>string</code>	GMSACredentialSpecName is the name of the GMSA credential spec to use.
<code>hostProcess</code>	<code>boolean</code>	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.
<code>runAsUserName</code>	<code>string</code>	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

Property	Type	Description
		PodSecurityContext. If set in both SecurityContext and PodSecurityContext, the value specified in SecurityContext takes precedence.

.spec.sentinel

Description

Sentinel defines Sentinel configuration settings Sentinel

Type

object

Property	Type	Description
<code>access</code>	<code>object</code>	Access the access for sentinel
<code>affinity</code>	<code>object</code>	Affinity
<code>customConfigs</code>	<code>object</code>	CustomConfigs the config for sentinel
<code>exporter</code>	<code>object</code>	Exporter defines the specification for the sentinel exporter
<code>image</code>	<code>string</code>	Image the valkey sentinel image

Property	Type	Description
<code>imagePullPolicy</code>	<code>string</code>	ImagePullPolicy the image pull policy
<code>imagePullSecrets</code>	<code>array</code>	ImagePullSecrets the image pull secrets
<code>monitorConfig</code>	<code>object</code>	MonitorConfig configs for sentinel to monitor this replication, including: • down-after-milliseconds • failover-timeout • parallel-syncs
<code>nodeSelector</code>	<code>object</code>	NodeSelector
<code>podAnnotations</code>	<code>object</code>	PodAnnotations
<code>quorum</code>	<code>integer</code>	Quorum the number of Sentinels that need to agree about the fact the master is not reachable, in order to really mark the master as failing, and eventually start a failover procedure if possible. If not specified, the default value is the majority of the Sentinels.
<code>replicas</code>	<code>integer</code>	Replicas the number of sentinel replicas

Property	Type	Description
<code>resources</code>	<code>object</code>	Resources the resources for sentinel
<code>securityContext</code>	<code>object</code>	SecurityContext
<code>sentinelReference</code>	<code>object</code>	SentinelReference the sentinel reference
<code>tolerations</code>	<code>array</code>	Tolerations

`.spec.sentinel.access`

Description

Access the access for sentinel

Type

`object`

Property	Type	Description
<code>annotations</code>	<code>object</code>	The annotations of the service which will be attached to services
<code>certIssuer</code>	<code>string</code>	Cert Issuer for external access TLS certificate

Property	Type	Description
<code>certIssuerType</code>	<code>string</code>	Cert Issuer Type for external access TLS certificate
<code>defaultPasswordSecret</code>	<code>string</code>	DefaultPasswordSecret refered to the secret which defined the password for default user The refered secret must have <code>password</code> key whose value matching regex: <code>^[a-zA-Z0-9_!@#\$\$%^&*()-_+=+?]{8,128}\$</code>
<code>enableTLS</code>	<code>boolean</code>	EnableTLS enable TLS for external access
<code>externalTLSSecret</code>	<code>string</code>	ExternalTLSSecret the external TLS secret to use, if not provided, the operator will issue one
<code>ipFamilyPrefer</code>	<code>string</code>	IPFamily represents the IP Family (IPv4 or IPv6). This type is used to express the family of an IP expressed by a type (e.g. <code>service.spec.ipFamilies</code>).
<code>ports</code>	<code>string</code>	Ports defines the nodeports of NodePort service
<code>serviceType</code>	<code>string</code>	ServiceType defines the type of the all related services

.spec.sentinel.access.annotations

Description

The annotations of the service which will be attached to services

Type

object

.spec.sentinel.affinity

Description

Affinity

Type

object

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

.spec.sentinel.affinity.nodeAffinity

Description

Describes node affinity scheduling rules for the pod.

Type

object

Property	Type	Description
		The scheduler will pri to schedule pods to nodes that satisfy the affinity expressions specified by this field, it may choose a node violates one or more the expressions. The node that is most preferred is the one v the greatest sum of weights, i.e. for each node that meets all o scheduling requireme (resource request, requiredDuringSched affinity expressions, € compute a sum by iterating through the elements of this field adding "weight" to the sum if the node matc the corresponding matchExpressions; th node(s) with the high sum are the most preferred.
preferredDuringSchedulingIgnoredDuringExecution	array	
requiredDuringSchedulingIgnoredDuringExecution	object	If the affinity requiren specified by this field

Property	Type	Description
		not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field are not met at any point during pod execution (e.g. due to a system restart or may not try to schedule the pod again), the system may eventually evict the pod from its node.

`.spec.sentinel.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

`.spec.sentinel.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.

.spec.sentinel.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference

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

`.spec.sentinel.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchExpressions`

Description

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

Type

array

`.spec.sentinel.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchExpressions`

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
<code>key</code>	<code>string</code>	The label key that the selector applies to.
<code>operator</code>	<code>string</code>	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt.

Property	Type	Description
<code>values</code>	<code>array</code>	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.

`.spec.sentinel.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchExpressions[].values`

Description

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.

Type

`array`

`.spec.sentinel.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchExpressions[].values[]`

Type

`string`

`.spec.sentinel.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchFields`

Description

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

Type

array

.spec.sentinel.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchFields[]

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	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.

.spec.sentinel.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchFields[].values

Description

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.

Type

array

.spec.sentinel.affinity.nodeAffinity.preferredDuringSchedulingIgnoredDuringExecution[].preference.matchFields[].values[]

Type

string

.spec.sentinel.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
<code>nodeSelectorTerms</code>	<code>array</code>	Required. A list of node selector terms. The terms are ORed.

`.spec.sentinel.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms`

Description

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

Type

`array`

`.spec.sentinel.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[]`

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
<code>matchExpressions</code>	<code>array</code>	A list of node selector requirements by node's labels.
<code>matchFields</code>	<code>array</code>	A list of node selector requirements by node's fields.

`.spec.sentinel.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matchExpressions`

Description

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

Type

array

`.spec.sentinel.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matchExpressions[]`

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
<code>key</code>	<code>string</code>	The label key that the selector applies to.
<code>operator</code>	<code>string</code>	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt.

Property	Type	Description
<code>values</code>	<code>array</code>	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.

.spec.sentinel.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matchExpressions[].values

Description

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.

Type

`array`

.spec.sentinel.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matchExpressions[].values[]

Type

`string`

.spec.sentinel.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matchFi

elds

Description

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

Type

array

.spec.sentinel.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matchFields[]

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	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

Property	Type	Description
		element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

.spec.sentinel.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matchFields[].values

Description

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.

Type

array

.spec.sentinel.affinity.nodeAffinity.requiredDuringSchedulingIgnoredDuringExecution.nodeSelectorTerms[].matchFields[].values[]

Type

string

.spec.sentinel.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
<code>preferredDuringSchedulingIgnoredDuringExecution</code>	<code>array</code>	The scheduler will prefer to schedule pods to nodes that satisfy the affinity expressions specified by this field. 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 affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has a label which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
<code>requiredDuringSchedulingIgnoredDuringExecution</code>	<code>array</code>	If the affinity requirement specified by this field is not met at scheduling time, the pod will not

Property	Type	Description
		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 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 intersected, i.e. all terms must be satisfied.

`.spec.sentinel.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

`.spec.sentinel.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
<code>podAffinityTerm</code>	<code>object</code>	Required. A pod affinity term, associated with the corresponding weight.
<code>weight</code>	<code>integer</code>	weight associated with matching the corresponding <code>podAffinityTerm</code> , in the range 1-100.

`.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm`

Description

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

Type

`object`

Required

`topologyKey`

Property	Type	Description
<code>labelSelector</code>	<code>object</code>	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.
<code>matchLabelKeys</code>	<code>array</code>	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 <code>labelSelector</code> as <code>key in (value)</code> 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 <code>matchLabelKeys</code> and <code>labelSelector</code>. Also, <code>matchLabelKeys</code> cannot be set when <code>labelSelector</code> isn't set.

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

`.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector`

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
<code>matchExpressions</code>	<code>array</code>	<code>matchExpressions</code> is a list of label selector requirements. The requirements are ANDed.
<code>matchLabels</code>	<code>object</code>	<code>matchLabels</code> is a map of {key,value} pairs. A single {key,value} in the <code>matchLabels</code> map is equivalent to an element of <code>matchExpressions</code> , whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

`.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector.matchExpressions`

Description

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

Type

array

`.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.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
<code>key</code>	<code>string</code>	key is the label key that the selector applies to.
<code>operator</code>	<code>string</code>	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
<code>values</code>	<code>array</code>	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.

`.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector.matchExpressions[].values`

Description

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.

Type

`array`

`.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector.matchExpressions[].values[]`

Type

`string`

`.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector.matchLabels`

Description

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.

Type

object

.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.matchLabelKeys

Description

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.

Type

array

.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.matchLabelKeys[]

Type

string

.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.mismatchLabelKeys

Description

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.

Type

array

`.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.mismatchLabelKeys[]`

Type

string

`.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaceSelector`

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
<code>matchExpressions</code>	<code>array</code>	<code>matchExpressions</code> is a list of label selector requirements. The requirements are ANDed.
<code>matchLabels</code>	<code>object</code>	<code>matchLabels</code> is a map of {key,value} pairs. A single {key,value} in the <code>matchLabels</code> map is equivalent to an element of <code>matchExpressions</code> , whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

`.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaceSelector.matchExpressions`

Description

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

Type

`array`

`.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaceSelector.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	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.

.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaceSelector.matchExpressions[].values

Description

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.

Type

array

.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespace

Selector.matchExpressions[].values[]

Type

string

.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaceSelector.matchLabels

Description

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.

Type

object

.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaces

Description

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".

Type

array

.spec.sentinel.affinity.podAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaces[]

Type

string

.spec.sentinel.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

.spec.sentinel.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
<code>labelSelector</code>	<code>object</code>	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.
<code>matchLabelKeys</code>	<code>array</code>	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 <code>labelSelector</code> as <code>key in (value)</code> 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 <code>matchLabelKeys</code> and <code>labelSelector</code>. Also, <code>matchLabelKeys</code> cannot be set when <code>labelSelector</code> isn't set.

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

`.spec.sentinel.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector`

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
<code>matchExpressions</code>	<code>array</code>	<code>matchExpressions</code> is a list of label selector requirements. The requirements are ANDed.
<code>matchLabels</code>	<code>object</code>	<code>matchLabels</code> is a map of {key,value} pairs. A single {key,value} in the <code>matchLabels</code> map is equivalent to an element of <code>matchExpressions</code> , whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

`.spec.sentinel.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExpressions`

Description

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

Type

array

`.spec.sentinel.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].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
<code>key</code>	<code>string</code>	key is the label key that the selector applies to.
<code>operator</code>	<code>string</code>	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

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

`.spec.sentinel.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExpressions[].values`

Description

`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.

Type

`array`

`.spec.sentinel.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExpressions[].values[]`

Type

`string`

`.spec.sentinel.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchLabels`

Description

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.

Type

object

.spec.sentinel.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].matchLabelKeys

Description

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.

Type

array

.spec.sentinel.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].matchLabelKeys[]

Type

string

.spec.sentinel.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].mismatchLabelKeys

Description

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.

Type

array

`.spec.sentinel.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].mismatchLabelKeys[]`

Type

string

`.spec.sentinel.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector`

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
<code>matchExpressions</code>	array	<code>matchExpressions</code> is a list of label selector requirements. The requirements are ANDed.
<code>matchLabels</code>	object	<code>matchLabels</code> is a map of {key,value} pairs. A single {key,value} in the <code>matchLabels</code> map is equivalent to an element of <code>matchExpressions</code> , whose key field is

Property	Type	Description
		"key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

.spec.sentinel.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.matchExpressions

Description

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

Type

array

.spec.sentinel.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.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
<code>operator</code>	<code>string</code>	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
<code>values</code>	<code>array</code>	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.

`.spec.sentinel.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.matchExpressions[].values`

Description

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.

Type

`array`

`.spec.sentinel.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.matchExpressions[].values[]`

Type

`string`

.spec.sentinel.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.matchLabels

Description

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.

Type

object

.spec.sentinel.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaces

Description

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".

Type

array

.spec.sentinel.affinity.podAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaces[]

Type

string

.spec.sentinel.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
<code>preferredDuringSchedulingIgnoredDuringExecution</code>	<code>array</code>	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expression specified by this field. it may choose a node that violates one or more 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 scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expression 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.
<code>requiredDuringSchedulingIgnoredDuringExecution</code>	<code>array</code>	If the anti-affinity requirements specified in this field are not met by a node, the pod must not be scheduled time, the pod

Property	Type	Description
		will not be scheduled 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 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 intersected, i.e. all terms must be satisfied.

`.spec.sentinel.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 subtracting "weight" from 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

`.spec.sentinel.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
<code>podAffinityTerm</code>	<code>object</code>	Required. A pod affinity term, associated with the corresponding weight.
<code>weight</code>	<code>integer</code>	weight associated with matching the corresponding <code>podAffinityTerm</code> , in the range 1-100.

`.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm`

Description

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

Type

`object`

Required

`topologyKey`

Property	Type	Description
<code>labelSelector</code>	<code>object</code>	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.
<code>matchLabelKeys</code>	<code>array</code>	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 <code>labelSelector</code> as <code>key in (value)</code> 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 <code>matchLabelKeys</code> and <code>labelSelector</code>. Also, <code>matchLabelKeys</code> cannot be set when <code>labelSelector</code> isn't set.

Property	Type	Description
<code>mismatchLabelKeys</code>	<code>array</code>	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 <code>labelSelector</code> as <code>key notin (value)</code> 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.
<code>namespaceSelector</code>	<code>object</code>	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.
<code>namespaces</code>	<code>array</code>	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
<code>topologyKey</code>	<code>string</code>	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.

`.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector`

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
<code>matchExpressions</code>	<code>array</code>	matchExpressions is a list of label selector requirements. The requirements are ANDed.
<code>matchLabels</code>	<code>object</code>	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.

`.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector.matchExpressions`

Description

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

Type

array

`.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.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
<code>key</code>	<code>string</code>	key is the label key that the selector applies to.
<code>operator</code>	<code>string</code>	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Property	Type	Description
<code>values</code>	<code>array</code>	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.

`.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector.matchExpressions[].values`

Description

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.

Type

`array`

`.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector.matchExpressions[].values[]`

Type

`string`

`.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.labelSelector.matchLabels`

Description

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.

Type

object

.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.matchLabelKeys

Description

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.

Type

array

.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.matchLabelKeys[]

Type

string

.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.mismatchLabelKeys

Description

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.

Type

array

`.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.mismatchLabelKeys[]`

Type

string

`.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaceSelector`

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
<code>matchExpressions</code>	<code>array</code>	<code>matchExpressions</code> is a list of label selector requirements. The requirements are ANDed.
<code>matchLabels</code>	<code>object</code>	<code>matchLabels</code> is a map of {key,value} pairs. A single {key,value} in the <code>matchLabels</code> map is equivalent to an element of <code>matchExpressions</code> , whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

`.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaces.selector.matchExpressions`

Description

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

Type

`array`

`.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaces.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	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.

.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaces.selector.matchExpressions[].values

Description

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.

Type

array

.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaces.selector.matchExpressions[].values

paceSelector.matchExpressions[].values[]

Type

string

.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaceSelector.matchLabels

Description

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.

Type

object

.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaces

Description

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".

Type

array

.spec.sentinel.affinity.podAntiAffinity.preferredDuringSchedulingIgnoredDuringExecution[].podAffinityTerm.namespaces[]

Type

string

.spec.sentinel.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

.spec.sentinel.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
<code>labelSelector</code>	<code>object</code>	A label query over a set of resources, in this case pods. If it's null, this PodAffinityTerm matches with no Pods.
<code>matchLabelKeys</code>	<code>array</code>	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 <code>labelSelector</code> as <code>key in (value)</code> 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 <code>matchLabelKeys</code> and <code>labelSelector</code>. Also, <code>matchLabelKeys</code> cannot be set when <code>labelSelector</code> isn't set.

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

`.spec.sentinel.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector`

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
<code>matchExpressions</code>	<code>array</code>	<code>matchExpressions</code> is a list of label selector requirements. The requirements are ANDed.
<code>matchLabels</code>	<code>object</code>	<code>matchLabels</code> is a map of {key,value} pairs. A single {key,value} in the <code>matchLabels</code> map is equivalent to an element of <code>matchExpressions</code> , whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

`.spec.sentinel.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExpressions`

Description

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

Type

array

`.spec.sentinel.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].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
<code>key</code>	<code>string</code>	key is the label key that the selector applies to.
<code>operator</code>	<code>string</code>	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

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

`.spec.sentinel.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExpressions[].values`

Description

`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.

Type

`array`

`.spec.sentinel.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchExpressions[].values[]`

Type

`string`

`.spec.sentinel.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].labelSelector.matchLabels`

Description

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.

Type

object

.spec.sentinel.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].matchLabelKeys

Description

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.

Type

array

.spec.sentinel.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].matchLabelKeys[]

Type

string

.spec.sentinel.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].mismatchLabelKeys

Description

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.

Type

array

`.spec.sentinel.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].mismatchLabelKeys[]`

Type

string

`.spec.sentinel.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector`

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
<code>matchExpressions</code>	array	<code>matchExpressions</code> is a list of label selector requirements. The requirements are ANDed.
<code>matchLabels</code>	object	<code>matchLabels</code> is a map of {key,value} pairs. A single {key,value} in the <code>matchLabels</code> map is equivalent to an element of <code>matchExpressions</code> , whose key field is

Property	Type	Description
		"key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

`.spec.sentinel.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.matchExpressions`

Description

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

Type

array

`.spec.sentinel.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.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
<code>operator</code>	<code>string</code>	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
<code>values</code>	<code>array</code>	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.

`.spec.sentinel.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.matchExpressions[].values`

Description

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.

Type

`array`

`.spec.sentinel.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.matchExpressions[].values[]`

Type

`string`

.spec.sentinel.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaceSelector.matchLabels

Description

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.

Type

object

.spec.sentinel.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaces

Description

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".

Type

array

.spec.sentinel.affinity.podAntiAffinity.requiredDuringSchedulingIgnoredDuringExecution[].namespaces[]

Type

string

.spec.sentinel.customConfigs

Description

CustomConfigs the config for sentinel

Type

object

.spec.sentinel.exporter

Description

Exporter defines the specification for the sentinel exporter

Type

object

Property	Type	Description
image	string	Image the exporter image
imagePullPolicy	string	ImagePullPolicy
resources	object	Resources for setting resource requirements for the Pod Resources *v1.ResourceRequirements
securityContext	object	SecurityContext for setting security context for the Pod SecurityContext *corev1.SecurityContext

.spec.sentinel.exporter.resources

Description

Resources for setting resource requirements for the Pod Resources
*v1.ResourceRequirements

Type

object

Property	Type	Description
		Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container.
claims	array	This field depends on the DynamicResourceAllocation feature gate. This field is immutable. It can only be set for containers.
limits	object	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/ ↗
requests	object	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/ ↗

.spec.sentinel.exporter.resources.claims

Description

Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This field depends on the DynamicResourceAllocation feature gate. This field is immutable. It can only be set for containers.

Type

array

.spec.sentinel.exporter.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.

.spec.sentinel.exporter.resources.limits

Description

Limits describes the maximum amount of compute resources allowed. More info: <https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/>

Type

object

.spec.sentinel.exporter.resources.requests

Description

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/>

Type

object

.spec.sentinel.exporter.securityContext

Description

SecurityContext for setting security context for the Pod SecurityContext

*corev1.SecurityContext

Type

object

Property	Type	Description
<code>allowPrivilegeEscalation</code>	<code>boolean</code>	AllowPrivilegeEscalation controls whether a process can gain more privileges than its parent process. This bool directly controls if the <code>no_new_privs</code> flag will be set on the container process. AllowPrivilegeEscalation is true always when the container is: - run as Privileged - has <code>CAP_SYS_ADMIN</code> Note that this field cannot be set when <code>spec.os.name</code> is windows.
<code>appArmorProfile</code>	<code>object</code>	appArmorProfile is the AppArmor options to use by this container. If set, this profile overrides the pod's appArmorProfile. Note

Property	Type	Description
		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.
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. 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.

Property	Type	Description
<code>runAsGroup</code>	<code>integer</code>	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.
<code>runAsNonRoot</code>	<code>boolean</code>	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.
<code>runAsUser</code>	<code>integer</code>	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.

Property	Type	Description
<code>seLinuxOptions</code>	<code>object</code>	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.
<code>seccompProfile</code>	<code>object</code>	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.
<code>windowsOptions</code>	<code>object</code>	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.

`.spec.sentinel.exporter.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.

.spec.sentinel.exporter.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
<code>add</code>	<code>array</code>	Added capabilities
<code>drop</code>	<code>array</code>	Removed capabilities

.spec.sentinel.exporter.securityContext.capabilities.add

Description

Added capabilities

Type

`array`

.spec.sentinel.exporter.securityContext.capabilities.add[]

Description

Capability represent POSIX capabilities type

Type

`string`

.spec.sentinel.exporter.securityContext.capabilities.drop

Description

Removed capabilities

Type

`array`

.spec.sentinel.exporter.securityContext.capabilities.drop[]

Description

Capability represent POSIX capabilities type

Type

string

.spec.sentinel.exporter.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.

.spec.sentinel.exporter.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.
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.

.spec.sentinel.exporter.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
<code>gmsaCredentialSpec</code>	<code>string</code>	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.
<code>gmsaCredentialSpecName</code>	<code>string</code>	GMSACredentialSpecName is the name of the GMSA credential spec to use.
<code>hostProcess</code>	<code>boolean</code>	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
<code>runAsUserName</code>	<code>string</code>	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.

`.spec.sentinel.imagePullSecrets`

Description

ImagePullSecrets the image pull secrets

Type

`array`

`.spec.sentinel.imagePullSecrets[]`

Description

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

Type

`object`

Property	Type	Description
<code>name</code>	<code>string</code>	Name of the referent. This field is effectively required, but due to backwards compatibility is allowed to be empty. Instances of this type with an empty value here are almost certainly wrong. More info:

Property	Type	Description
		https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names ↗

.spec.sentinel.monitorConfig

Description

MonitorConfig configs for sentinel to monitor this replication, including: - down-after-milliseconds - failover-timeout - parallel-syncs

Type

object

.spec.sentinel.nodeSelector

Description

NodeSelector

Type

object

.spec.sentinel.podAnnotations

Description

PodAnnotations

Type

object

.spec.sentinel.resources

Description

Resources the resources for sentinel

Type

object

Property	Type	Description
		Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container.
claims	array	This field depends on the DynamicResourceAllocation feature gate. This field is immutable. It can only be set for containers.
limits	object	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/ ↗
requests	object	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/ ↗

.spec.sentinel.resources.claims

Description

Claims lists the names of resources, defined in spec.resourceClaims, that are used by this container. This field depends on the DynamicResourceAllocation feature gate. This field is immutable. It can only be set for containers.

Type

array

.spec.sentinel.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.

.spec.sentinel.resources.limits**Description**

Limits describes the maximum amount of compute resources allowed. More info: <https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/>

Type

object

.spec.sentinel.resources.requests

Description

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/>

Type

object

.spec.sentinel.securityContext

Description

SecurityContext

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)

Property	Type	Description
		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
<code>runAsNonRoot</code>	<code>boolean</code>	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.
<code>runAsUser</code>	<code>integer</code>	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.
<code>seLinuxChangePolicy</code>	<code>string</code>	<code>seLinuxChangePolicy</code> 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

Property	Type	Description
		Pods sharing the same volume on the same node. "MountOption" mounts all eligible Pod volumes with <code>-o context</code> 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 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 <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>.

Property	Type	Description
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 spec.os.name is windows.
seccompProfile	object	The seccomp 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
<code>supplementalGroups</code>	<code>array</code>	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.
<code>supplementalGroupsPolicy</code>	<code>string</code>	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.
<code>sysctls</code>	<code>array</code>	Sysctls hold a list of namespaced sysctls used for the pod. Pods with unsupported sysctls (by the container runtime) might fail

Property	Type	Description
		to launch. Note that this field cannot be set when spec.os.name is windows.
<code>windowsOptions</code>	<code>object</code>	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.

`.spec.sentinel.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
<code>localhostProfile</code>	<code>string</code>	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".

Property	Type	Description
<code>type</code>	<code>string</code>	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.

`.spec.sentinel.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
<code>level</code>	<code>string</code>	Level is SELinux level label that applies to the container.
<code>role</code>	<code>string</code>	Role is a SELinux role label that applies to the container.
<code>type</code>	<code>string</code>	Type is a SELinux type label that applies to the container.
<code>user</code>	<code>string</code>	User is a SELinux user label that applies to the container.

.spec.sentinel.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.
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.

.spec.sentinel.securityContext.supplementalGroups

Description

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`.

Type

array

`.spec.sentinel.securityContext.supplementalGroups[]`

Type

integer

`.spec.sentinel.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

`.spec.sentinel.securityContext.sysctls[]`

Description

Sysctl defines a kernel parameter to be set

Type

object

Required

name

value

Property	Type	Description
<code>name</code>	<code>string</code>	Name of a property to set
<code>value</code>	<code>string</code>	Value of a property to set

`.spec.sentinel.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
<code>gmsaCredentialSpec</code>	<code>string</code>	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.
<code>gmsaCredentialSpecName</code>	<code>string</code>	GMSACredentialSpecName is the name of the GMSA credential spec to use.

Property	Type	Description
<code>hostProcess</code>	<code>boolean</code>	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.
<code>runAsUserName</code>	<code>string</code>	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.

.spec.sentinel.sentinelReference

Description

SentinelReference the sentinel reference

Type

`object`

Property	Type	Description
<code>auth</code>	<code>object</code>	Auth the sentinel auth

Property	Type	Description
<code>nodes</code>	<code>array</code>	Addresses the sentinel addresses

`.spec.sentinel.sentinelReference.auth`

Description

Auth the sentinel auth

Type

`object`

Property	Type	Description
<code>passwordSecret</code>	<code>string</code>	PasswordSecret the password secret for valkey
<code>tlsSecret</code>	<code>string</code>	TLSSecret the tls secret
<code>username</code>	<code>string</code>	Username the username for valkey

`.spec.sentinel.sentinelReference.nodes`

Description

Addresses the sentinel addresses

Type

`array`

`.spec.sentinel.sentinelReference.nodes[]`

Type`object`

Property	Type	Description
<code>flags</code>	<code>string</code>	Flags
<code>ip</code>	<code>string</code>	IP the sentinel node ip
<code>port</code>	<code>integer</code>	Port the sentinel node port

.spec.sentinel.tolerations

Description

Tolerations

Type`array`

.spec.sentinel.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
<code>effect</code>	<code>string</code>	Effect indicates the taint effect to match. Empty means match all taint effects. When specified, allowed values are NoSchedule, PreferNoSchedule and NoExecute.
<code>key</code>	<code>string</code>	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.
<code>operator</code>	<code>string</code>	Operator represents a key's relationship to the value. Valid operators are Exists, Equal, Lt, and Gt. Defaults to Equal. Exists is equivalent to wildcard for value, so that a pod can tolerate all taints of a particular category. Lt and Gt perform numeric comparisons (requires feature gate TaintTolerationComparisonOperators).
<code>tolerationSeconds</code>	<code>integer</code>	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.

Property	Type	Description
<code>value</code>	<code>string</code>	Value is the taint value the toleration matches to. If the operator is Exists, the value should be empty, otherwise just a regular string.

.spec.storage

Description

Storage defines the storage settings for Valkey

Type

`object`

Property	Type	Description
<code>accessMode</code>	<code>string</code>	AccessMode is the access mode of the volume.
<code>annotations</code>	<code>object</code>	The annotations of the service which will be attached to services
<code>capacity</code>		Capacity is the cap of the volume to request. if not set and StorageClassName is set, the default StorageClass size will be the double size of memory limit.
<code>retainAfterDeleted</code>	<code>boolean</code>	RetainAfterDeleted defines whether the storage should be retained after the ValkeyCluster is deleted

Property	Type	Description
<code>storageClassName</code>	<code>string</code>	storageClassName is the name of the StorageClass required by the claim. if not set, the default StorageClass will be used

`.spec.storage.annotations`

Description

The annotations of the service which will be attached to services

Type

`object`

`.spec.tolerations`

Description

tolerations defines tolerations for the Pod

Type

`array`

`.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
<code>effect</code>	<code>string</code>	Effect indicates the taint effect to match. Empty means match all taint effects. When specified, allowed values are NoSchedule, PreferNoSchedule and NoExecute.
<code>key</code>	<code>string</code>	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.
<code>operator</code>	<code>string</code>	Operator represents a key's relationship to the value. Valid operators are Exists, Equal, Lt, and Gt. Defaults to Equal. Exists is equivalent to wildcard for value, so that a pod can tolerate all taints of a particular category. Lt and Gt perform numeric comparisons (requires feature gate TaintTolerationComparisonOperators).
<code>tolerationSeconds</code>	<code>integer</code>	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.

Property	Type	Description
<code>value</code>	<code>string</code>	Value is the taint value the toleration matches to. If the operator is Exists, the value should be empty, otherwise just a regular string.

.status

Description

ValkeyStatus defines the observed state of Valkey

Type

`object`

Property	Type	Description
<code>lastShardCount</code>	<code>integer</code>	LastShardCount indicates the last number of shards in the Valkey Cluster.
<code>lastVersion</code>	<code>string</code>	LastVersion indicates the last version of the Valkey instance.
<code>matchLabels</code>	<code>object</code>	Matching labels selector for Valkey
<code>message</code>	<code>string</code>	This field contains an additional message for the instance's status
<code>nodes</code>	<code>array</code>	ClusterNodes valkey nodes info

Property	Type	Description
<code>phase</code>	<code>string</code>	Phase indicates whether all the resource for the instance is ok. Values are as below: Initializing - Resource is in Initializing or Reconcile Ready - All resources is ok. In most cases, Ready means the cluster is ok to use Rebalancing - Cluster instance is rebalancing Failed - Error found when do resource reconcile, which not recoverable Paused - Instance paused which means workload replicas is set to 0

`.status.matchLabels`

Description

Matching labels selector for Valkey

Type

`object`

`.status.nodes`

Description

ClusterNodes valkey nodes info

Type

`array`

`.status.nodes[]`

Description

ValkeyNode represent a ValkeyCluster Node

Type

`object`

Required

ip

nodeName

podName

port

role

statefulSet

Property	Type	Description
id	string	ID is the valkey cluster node id, not runid
ip	string	IP is the ip of the node. if access announce is enabled, it will be the access ip
masterRef	string	MasterRef is the master node id of this node
nodeName	string	nodeName is the node name of the node where holds the pod
podName	string	PodName current pod name
port	string	Port is the port of the node. if access announce is enabled, it will be the access port
role	string	Role is the role of the node, master or slave
shardId	string	ShardID cluster shard id of the node

Property	Type	Description
slots	string	Slots is the slot range for the shard, eg: 0-1000,1002,1005-1100
statefulSet	string	StatefulSet is the statefulset name of this pod

API Endpoints

The following API endpoints are available:

- `/apis/rds.valkey.buf.red/v1alpha1/namespaces/{namespace}/valkeys`
 - **DELETE** : delete collection of Valkey
 - **GET** : list objects of kind Valkey
 - **POST** : create a new Valkey
- `/apis/rds.valkey.buf.red/v1alpha1/namespaces/{namespace}/valkeys/{name}`
 - **DELETE** : delete the specified Valkey
 - **GET** : read the specified Valkey
 - **PATCH** : partially update the specified Valkey
 - **PUT** : replace the specified Valkey
- `/apis/rds.valkey.buf.red/v1alpha1/namespaces/{namespace}/valkeys/{name}/status`
 - **GET** : read status of the specified Valkey
 - **PATCH** : partially update status of the specified Valkey
 - **PUT** : replace status of the specified Valkey

/apis/rds.valkey.buf.red/v1alpha1/namespaces/{namespace}/valkeys

HTTP method

DELETE

Description

delete collection of Valkey

HTTP responses

HTTP code	Response body
200 - OK	Status  schema
401 - Unauthorized	Empty

HTTP method

GET

Description

list objects of kind Valkey

HTTP responses

HTTP code	Response body
200 - OK	ValkeyList  schema
401 - Unauthorized	Empty

HTTP method

POST

Description

create a new Valkey

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> 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
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> 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 <code>BadRequest</code> 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.

Body parameters

Parameter	Type	Description
<code>body</code>	<code>Valkey</code> schema	<code>application/json</code> formatted

HTTP responses

HTTP code	Response body
200 - OK	<code>Valkey</code> schema
201 - Created	<code>Valkey</code> schema

HTTP code	Response body
202 - Accepted	Valkey schema
401 - Unauthorized	Empty

/apis/rds.valkey.buf.red/v1alpha1/namespaces/{namespace}/valkeys/{name}

HTTP method

[DELETE](#)

Description

delete the specified Valkey

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

HTTP responses

HTTP code	Response body
200 - OK	Status  schema
202 - Accepted	Status  schema
401 - Unauthorized	Empty

HTTP method

[GET](#)

Description

read the specified Valkey

HTTP responses

HTTP code	Response body
200 - OK	<code>Valkey</code> schema
401 - Unauthorized	Empty

HTTP method

`PATCH`

Description

partially update the specified Valkey

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	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
<code>fieldValidation</code>	<code>string</code>	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

Parameter	Type	Description
		will contain all unknown and duplicate fields encountered.

HTTP responses

HTTP code	Response body
200 - OK	<code>Valkey</code> schema
401 - Unauthorized	Empty

HTTP method

`PUT`

Description

replace the specified Valkey

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	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
<code>fieldValidation</code>	<code>string</code>	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

Parameter	Type	Description
		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.

Body parameters

Parameter	Type	Description
body	Valkey schema	application/json formatted

HTTP responses

HTTP code	Response body
200 - OK	Valkey schema
201 - Created	Valkey schema
401 - Unauthorized	Empty

/apis/rds.valkey.buf.red/v1alpha1/namespaces/{namespace}/valkeys/{name}/status

HTTP method

GET

Description

read status of the specified Valkey

HTTP responses

HTTP code	Response body
200 - OK	Valkey schema

HTTP code	Response body
401 - Unauthorized	Empty

HTTP method

PATCH

Description

partially update status of the specified Valkey

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> 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
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> 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 <code>BadRequest</code> 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.

HTTP responses

HTTP code	Response body
200 - OK	<code>Valkey</code> schema
401 - Unauthorized	Empty

HTTP method

`PUT`

Description

replace status of the specified Valkey

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	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
<code>fieldValidation</code>	<code>string</code>	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.

Body parameters

Parameter	Type	Description
<code>body</code>	<code>Valkey</code> schema	<code>application/json</code> formatted

HTTP responses

HTTP code	Response body
200 - OK	<code>Valkey</code> schema
201 - Created	<code>Valkey</code> schema
401 - Unauthorized	Empty

User

`User` manages a Valkey access control list (ACL) account for an existing instance. Custom users must reference a same-namespace Secret with a `password` key.

TOC

[Main fields](#)[Specification](#)[API Endpoints](#)

Main fields

Field	Purpose	Boundary
<code>spec.accountType</code>	<code>system</code> or <code>custom</code>	Applications use <code>custom</code> ; <code>system</code> is reserved for the <code>operator</code> account.
<code>spec.arch</code>	Owning instance architecture	Must match <code>cluster</code> , <code>failover</code> , or <code>replica</code> .
<code>spec.username</code>	Valkey ACL username	Use a non-empty name containing only letters, digits, and hyphens; maximum 31 characters. The inspected webhook does

Field	Purpose	Boundary
		not enforce this helper restriction during admission.
<code>spec.passwordSecrets</code>	Ordered Secret names used during password transitions	Every Secret is in the same namespace and contains key <code>password</code> ; passwords are 8–32 characters.
<code>spec.aclRules</code>	Command, key, and channel permissions	Custom accounts cannot receive ACL-management capability.
<code>spec.instanceName</code>	Owning <code>Valkey</code> name	Required. The webhook does not define a supported move between instances; create a new <code>User</code> instead.

Read the canonical phase from `status.phase`. `status.Phase` is a legacy mirror retained for compatibility; new clients should not depend on its capitalization.

Description

User is the Schema for the users API

Type

`object`

Specification

Property	Type	Description
<code>apiVersion</code>	<code>string</code>	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	ObjectMeta is metadata that all persisted resources must have, which includes all objects users must create.
spec	object	UserSpec defines the desired state of User
status	object	UserStatus defines the observed state of User

.spec

Description

UserSpec defines the desired state of User

Type

object

Required

instanceName

username

Property	Type	Description
<code>accountType</code>	<code>string</code>	user account type
<code>aclRules</code>	<code>string</code>	AcIRules acl rules string
<code>arch</code>	<code>string</code>	user account type
<code>instanceName</code>	<code>string</code>	InstanceName instance Name (required)
<code>passwordSecrets</code>	<code>array</code>	PasswordSecrets Password secret name, key is password
<code>username</code>	<code>string</code>	Username (required)

`.spec.passwordSecrets`

Description

PasswordSecrets Password secret name, key is password

Type

`array`

`.spec.passwordSecrets[]`

Type

`string`

.status

Description

UserStatus defines the observed state of User

Type

object

Property	Type	Description
Phase	string	OldPhase mirrors Phase under the legacy capital-"Phase" JSON key. Earlier operator versions stored the phase as <code>.status.Phase</code> (non-conventional capitalization), which is invisible to clients/tooling reading the conventional <code>.status.phase</code> . The canonical field is now <code>phase</code> ; OldPhase is kept and written in lockstep so resources and readers built against the old key keep working. New clients should read <code>phase</code> .
aclRules	string	AclRules acl rules of valkey
message	string	Message
phase	string	Phase indicates the current state of the User resource, exposed under the conventional <code>.status.phase</code> key.

API Endpoints

The following API endpoints are available:

- `/apis/valkey.buf.red/v1alpha1/namespaces/{namespace}/users`
 - **DELETE** : delete collection of User
 - **GET** : list objects of kind User
 - **POST** : create a new User
- `/apis/valkey.buf.red/v1alpha1/namespaces/{namespace}/users/{name}`
 - **DELETE** : delete the specified User
 - **GET** : read the specified User
 - **PATCH** : partially update the specified User
 - **PUT** : replace the specified User
- `/apis/valkey.buf.red/v1alpha1/namespaces/{namespace}/users/{name}/status`
 - **GET** : read status of the specified User
 - **PATCH** : partially update status of the specified User
 - **PUT** : replace status of the specified User

`/apis/valkey.buf.red/v1alpha1/namespaces/{namespace}/users`

HTTP method

DELETE

Description

delete collection of User

HTTP responses

HTTP code	Response body
200 - OK	Status ↗ schema
401 - Unauthorized	Empty

HTTP method

GET

Description

list objects of kind User

HTTP responses

HTTP code	Response body
200 - OK	<code>UserList</code> schema
401 - Unauthorized	Empty

HTTP method

POST

Description

create a new User

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	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
<code>fieldValidation</code>	<code>string</code>	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

Parameter	Type	Description
		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.

Body parameters

Parameter	Type	Description
body	User schema	application/json formatted

HTTP responses

HTTP code	Response body
200 - OK	User schema
201 - Created	User schema
202 - Accepted	User schema
401 - Unauthorized	Empty

/apis/valkey.buf.red/v1alpha1/namespaces/{namespace}/users/{name}

HTTP method

DELETE

Description

delete the specified User

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	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

HTTP responses

HTTP code	Response body
200 - OK	<code>Status</code>  schema
202 - Accepted	<code>Status</code>  schema
401 - Unauthorized	Empty

HTTP method

`GET`

Description

read the specified User

HTTP responses

HTTP code	Response body
200 - OK	<code>User</code>  schema
401 - Unauthorized	Empty

HTTP method

`PATCH`

Description

partially update the specified User

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> 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
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> 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 <code>BadRequest</code> 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.

HTTP responses

HTTP code	Response body
200 - OK	<code>User</code> schema
401 - Unauthorized	Empty

HTTP method

`PUT`

Description

replace the specified User

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> 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
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> 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 <code>BadRequest</code> 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.

Body parameters

Parameter	Type	Description
<code>body</code>	<code>User</code> schema	<code>application/json</code> formatted

HTTP responses

HTTP code	Response body
200 - OK	<code>User</code> schema

HTTP code	Response body
201 - Created	<code>User</code> schema
401 - Unauthorized	Empty

/apis/valkey.buf.red/v1alpha1/namespaces/{namespace}/users/{name}/status

HTTP method

`GET`

Description

read status of the specified User

HTTP responses

HTTP code	Response body
200 - OK	<code>User</code> schema
401 - Unauthorized	Empty

HTTP method

`PATCH`

Description

partially update status of the specified User

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	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
<code>fieldValidation</code>	<code>string</code>	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.

HTTP responses

HTTP code	Response body
200 - OK	<code>User</code> schema
401 - Unauthorized	Empty

HTTP method

`PUT`

Description

replace status of the specified User

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun

Parameter	Type	Description
		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
<code>fieldValidation</code>	<code>string</code>	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.

Body parameters

Parameter	Type	Description
<code>body</code>	<code>User</code> schema	<code>application/json</code> formatted

HTTP responses

HTTP code	Response body
200 - OK	<code>User</code> schema
201 - Created	<code>User</code> schema
401 - Unauthorized	Empty

