Analytical Database APIs

ClickHouseInstallations ClickHouseInstallationTemplate ClickHouse

ClickHouseInstallations

描述

define a set of Kubernetes resources (StatefulSet, PVC, Service, ConfigMap) which describe behavior one or more ClickHouse clusters

类型

`object`

必填

`spec`

规格

属性	类型	描述
`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

属性	类型	描述
		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.
`status`	`object`	Current ClickHouseInstallation manifest status, contains many fields like a normalized configuration, clickhouse-operator version, current action and all applied action list, current taskID and all applied taskIDs and other
`spec`	`object`	Specification of the desired behavior of one or more ClickHouse clusters More info: https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md ↗

.status

描述

Current ClickHouseInstallation manifest status, contains many fields like a normalized configuration, clickhouse-operator version, current action and all applied action list, current taskID and all applied taskIDs and other

类型

`object`

属性	类型	描述
`chop-version`	`string`	ClickHouse operator version
`chop-commit`	`string`	ClickHouse operator git commit SHA
`chop-date`	`string`	ClickHouse operator build date
`chop-ip`	`string`	IP address of the operator's pod which managed this CHI
`clusters`	`integer`	Clusters count
`shards`	`integer`	Shards count
`replicas`	`integer`	Replicas count
`hosts`	`integer`	Hosts count
`status`	`string`	Status
`taskID`	`string`	Current task id

属性	类型	描述
`taskIDsStarted`	`array`	Started task ids
`taskIDsCompleted`	`array`	Completed task ids
`action`	`string`	Action
`actions`	`array`	Actions
`error`	`string`	Last error
`errors`	`array`	Errors
`updated`	`integer`	Updated Hosts count
`added`	`integer`	Added Hosts count
`deleted`	`integer`	Deleted Hosts count
`delete`	`integer`	About to delete Hosts count

属性	类型	描述
`pods`	`array`	Pods
`pod-ips`	`array`	Pod IPs
`fqdns`	`array`	Pods FQDNs
`endpoint`	`string`	Endpoint
`generation`	`integer`	Generation
`normalized`	`object`	Normalized CHI requested
`normalizedCompleted`	`object`	Normalized CHI completed

.status.taskIDsStarted

描述

Started task ids

类型

`array`

.status.taskIDsStarted[]

类型

`string`

.status.taskIDsCompleted

描述

Completed task ids

类型

`array`

.status.taskIDsCompleted[]

类型

`string`

.status.actions

描述

Actions

类型

`array`

.status.actions[]

类型

`string`

.status.errors

描述

Errors

类型

`array`

.status.errors[]

类型

`string`

.status.pods

描述

Pods

类型

`array`

.status.pods[]

类型

`string`

.status.pod-ips

描述

Pod IPs

类型

`array`

.status.pod-ips[]

类型

`string`

.status.fqdns

描述

Pods FQDNs

类型

`array`

.status.fqdns[]

类型

`string`

.status.normalized

描述

Normalized CHI requested

类型

`object`

.status.normalizedCompleted

描述

Normalized CHI completed

类型

`object`

.spec

描述

Specification of the desired behavior of one or more ClickHouse clusters More info: https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md

类型

`object`

属性	类型	描述
`taskID`	`string`	Allows to define custom taskID for named update o status of this update execution in .status.taskIDs fie update of chi manifest will generate random taskID
`stop`	`string`	Allow stop all ClickHouse clusters described in curr mechanism works as follows: • When `stop` is `1` then setup `Replicas: 0` current `chi` StatefulSet resource, all `Pods` a resources will desctroy, but PVCs still live • When `stop` is `0` then `Pods` will created ag retained PVCs and `Service` also will created
`restart`	`string`	This is a 'soft restart' button. When set to 'RollingU restart ClickHouse pods in a graceful way. Remove order to avoid unneeded restarts
`troubleshoot`	`string`	allows troubleshoot Pods during CrashLoopBack st wrong configuration, `clickhouse-server` wouldr
`namespaceDomainPattern`	`string`	custom domain suffix which will add to end of `Ser` use it when you use custom cluster domain in your

属性	类型	描述
`templating`	`object`	optional, define policy for auto applying ClickHouse inside ClickHouseInstallation
`reconciling`	`object`	optional, allows tuning reconciling cycle for Clickho clickhouse-operator side
`defaults`	`object`	define default behavior for whole ClickHouseInstall can be re-define on cluster, shard and replica level https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_expla ↗
`configuration`	`object`	allows configure multiple aspects and behavior for `server` instance and also allows describe multiple `server` clusters inside one `chi` resource
`templates`	`object`	allows define templates which will use for render Ku like StatefulSet, ConfigMap, Service, PVC, by defa operator have own templates, but you can override
`useTemplates`	`array`	list of `ClickHouseInstallationTemplate` (chit) r will merge with current `Chi` manifest during rende resources to create related ClickHouse clusters

.spec.templating

描述

optional, define policy for auto applying ClickHouseInstallationTemplate inside ClickHouseInstallation

类型

`object`

属性	类型	描述
`policy`	`string`	when defined as `auto` inside ClickhouseInstallationTemplate, it will auto add into all ClickHouseInstallation, manual value is default

.spec.reconciling

描述

optional, allows tuning reconciling cycle for ClickhouseInstallation from clickhouse-operator side

类型

`object`

属性	类型	描述
`policy`	`string`	DEPRECATED
`configMapPropagationTimeout`	`integer`	timeout in seconds when `clickhouse-opera` applied `ConfigMap` during reconcile `Click` pods will updated from cache see details: https://kubernetes.io/docs/concepts/configura configmaps-are-updated-automatically ↗

属性	类型	描述
`cleanup`	`object`	optional, define behavior for cleanup Kuberne reconcile cycle

.spec.reconciling.cleanup

描述

optional, define behavior for cleanup Kubernetes resources during reconcile cycle

类型

`object`

属性	类型	描述
`unknownObjects`	`object`	what clickhouse-operator shall do when found Kubernetes resources which should be managed with clickhouse-operator, but not have `ownerReference` to any currently managed `ClickHouseInstallation` resource, default behavior is `Delete`
`reconcileFailedObjects`	`object`	what clickhouse-operator shall do when reconciling Kubernetes resources are failed, default behavior is `Retain`

.spec.reconciling.cleanup.unknownObjects

描述

what clickhouse-operator shall do when found Kubernetes resources which should be managed with clickhouse-operator, but not have `ownerReference` to any currently

managed `ClickHouseInstallation` resource, default behavior is `Delete`

类型

`object`

属性	类型	描述
`statefulSet`	`string`	behavior policy for unknown StatefulSet, Delete by default
`pvc`	`string`	behavior policy for unknown PVC, Delete by default
`configMap`	`string`	behavior policy for unknown ConfigMap, Delete by default
`service`	`string`	behavior policy for unknown Service, Delete by default

.spec.reconciling.cleanup.reconcileFailedObjects

描述

what clickhouse-operator shall do when reconciling Kubernetes resources are failed, default behavior is `Retain`

类型

`object`

属性	类型	描述
`statefulSet`	`string`	behavior policy for failed StatefulSet reconciling, Retain by default

属性	类型	描述
`pvc`	`string`	behavior policy for failed PVC reconciling, Retain by default
`configMap`	`string`	behavior policy for failed ConfigMap reconciling, Retain by default
`service`	`string`	behavior policy for failed Service reconciling, Retain by default

.spec.defaults

描述

define default behavior for whole ClickHouseInstallation, some behavior can be re-define on cluster, shard and replica level More info: https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md#specdefaults

类型

`object`

属性	类型	描述
`replicasUseFQDN`	`string`	define should replicas be specified by FQDN in `<host></host>`. In case of "no" will use short hostname and clickhouse-server will use kubernetes default suffixes for DNS lookup "yes" by default

属性	类型	描述
`distributedDDL`	`object`	allows change `<yandex><distributed_ddl></distributed_ddl></yandex>` settings More info: https://clickhouse.tech/docs/en/operations/server-configuration-parameters/settings/#server-settings-distributed_ddl ↗
`storageManagement`	`object`	default storage management options
`templates`	`object`	optional, configuration of the templates names which will use for generate Kubernetes resources according to one or more ClickHouse clusters described in current ClickHouseInstallation (chi) resource

.spec.defaults.distributedDDL

描述

allows change `<yandex><distributed_ddl></distributed_ddl></yandex>` settings More info: https://clickhouse.tech/docs/en/operations/server-configuration-parameters/settings/#server-settings-distributed_ddl

类型

`object`

属性	类型	描述
`profile`	`string`	Settings from this profile will be used to execute DDL queries

.spec.defaults.storageManagement

描述

default storage management options

类型

`object`

属性	类型	描述
`provisioner`	`string`	defines `PVC` provisioner - be it StatefulSet or the Operator
`reclaimPolicy`	`string`	defines behavior of `PVC` deletion. `Delete` by default, if `Retain` specified then `PVC` will be kept when deleting StatefulSet

.spec.defaults.templates

描述

optional, configuration of the templates names which will use for generate Kubernetes resources according to one or more ClickHouse clusters described in current ClickHouseInstallation (chi) resource

类型

`object`

属性	类型	描述
`hostTemplate`	`string`	optional, template name from chi.spec.templates.hostTemplates, which will apply to configure every `clickhouse-`

属性	类型	描述
		`server` instance during render ConfigMap resources which will mount into `Pod`
`podTemplate`	`string`	optional, template name from chi.spec.templates.podTemplates, allows customization each `Pod` resource during render and reconcile each StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`dataVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse data directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`logVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse log directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`serviceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for one `Service` resource

属性	类型	描述
		which will created by `clickhouse-operator` which cover all clusters in whole `chi` resource
`clusterServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each clickhouse cluster described in `chi.spec.configuration.clusters`
`shardServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each shard inside clickhouse cluster described in `chi.spec.configuration.clusters`
`replicaServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each replica inside each shard inside each clickhouse cluster described in `chi.spec.configuration.clusters`

属性	类型	描述
`volumeClaimTemplate`	`string`	DEPRECATED! VolumeClaimTemplate is deprecated in favor of DataVolumeClaimTemplate and LogVolumeClaimTemplate

.spec.configuration

描述

allows configure multiple aspects and behavior for `clickhouse-server` instance and also allows describe multiple `clickhouse-server` clusters inside one `chi` resource

类型

`object`

属性	类型	描述
`zookeeper`	`object`	allows configure .. section in each `Pod` during generate `Confi` mounted in `/etc/clickhouse-server/config.d/` `clickhous` doesn't manage Zookeeper, please install Zookeeper separatelly https://github.com/Altinity/clickhouse-operator/tree/master/deplo currently, zookeeper (or clickhouse-keeper replacement) used fo *ReplicatedMergeTree table engines and for `distributed_ddl` https://clickhouse.tech/docs/en/operations/server-configuration-parameters/settings/#server-settings_zookeeper ↗
`users`	`object`	allows configure .. section in each `Pod` during generate `Confi` mount in `/etc/clickhouse-server/users.d/` you can config hashed, authorization restrictions, database level security row fil https://clickhouse.tech/docs/en/operations/settings/settings-user

属性	类型	描述
		will convert to XML, see examples https://github.com/Altinity/clic operator/blob/master/docs/custom_resource_explained.md#spe
`profiles`	`object`	allows configure .. section in each `Pod` during generate `Conf` mount in `/etc/clickhouse-server/users.d/` you can config settings profile More details: https://clickhouse.tech/docs/en/operations/settings/settings-profi will convert to XML, see examples https://github.com/Altinity/clic operator/blob/master/docs/custom_resource_explained.md#spe ↗
`quotas`	`object`	allows configure .. section in each `Pod` during generate `Conf` mount in `/etc/clickhouse-server/users.d/` you can config resource quotas More details: https://clickhouse.tech/docs/en/op Your yaml code will convert to XML, see examples https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md#spe ↗
`settings`	`object`	allows configure `clickhouse-server` settings inside ... tag in generate `ConfigMap` which will mount in `/etc/clickhouse-s` More details: https://clickhouse.tech/docs/en/operations/settings code will convert to XML, see examples https://github.com/Altini operator/blob/master/docs/custom_resource_explained.md#spe ↗
`files`	`object`	allows define content of any setting file inside each `Pod` during `ConfigMap` which will mount in `/etc/clickhouse-server/co` `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-se`

属性	类型	描述
		every key in this object is the file name every value in this objec you can use `!!binary |` and base64 for binary files, see deta https://yaml.org/type/binary.html ↗ each key could contains prefi COMMON, HOST or config.d, users.d, cond.d, wrong prefixes w also will ignored More details: https://github.com/Altinity/clickhou operator/blob/master/docs/chi-examples/05-settings-05-files-nes
`clusters`	`array`	describes ClickHouse clusters layout and allows change setting shard-level and replica-level every cluster is a set of StatefulSet contains only one Pod with `clickhouse-server` all Pods will r <remote_server> part of ClickHouse configs, mounted from Cor `/etc/clickhouse-server/config.d/chop-generated-remote` Clusters will use for Distributed table engine, more details: https://clickhouse.tech/docs/en/engines/table-engines/special/di `cluster` contains zookeeper settings (could be inherited from when you can create *ReplicatedMergeTree tables

.spec.configuration.zookeeper

描述

allows configure <yandex><zookeeper>..</zookeeper></yandex> section in each `Pod` during generate `ConfigMap` which will mounted in `/etc/clickhouse-server/config.d/` `clickhouse-operator` itself doesn't manage Zookeeper, please install Zookeeper separatelly look examples on https://github.com/Altinity/clickhouse-operator/tree/master/deploy/zookeeper/ currently, zookeeper (or clickhouse-keeper replacement) used for *ReplicatedMergeTree table engines and for `distributed_ddl` More details: https://clickhouse.tech/docs/en/operations/server-configuration-parameters/settings/#server-settings_zookeeper

类型

`object`

属性	类型	描述
`nodes`	`array`	describe every available zookeeper cluster node for interaction
`session_timeout_ms`	`integer`	session timeout during connect to Zookeeper
`operation_timeout_ms`	`integer`	one operation timeout during Zookeeper transactions
`root`	`string`	optional root znode path inside zookeeper to store ClickHouse related data (replication queue or distributed DDL)
`identity`	`string`	optional access credentials string with `user:password` format used when use digest authorization in Zookeeper

.spec.configuration.zookeeper.nodes

描述

describe every available zookeeper cluster node for interaction

类型

`array`

.spec.configuration.zookeeper.nodes[]

类型

`object`

属性	类型	描述
`host`	`string`	dns name or ip address for Zookeeper node
`port`	`integer`	TCP port which used to connect to Zookeeper node

.spec.configuration.users

描述

allows configure <yandex><users>..</users></yandex> section in each `Pod` during generate `ConfigMap` which will mount in `/etc/clickhouse-server/users.d/` you can configure password hashed, authorization restrictions, database level security row filters etc. More details: https://clickhouse.tech/docs/en/operations/settings/settings-users/ Your yaml code will convert to XML, see examples https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md#specconfigurationusers

类型

`object`

.spec.configuration.profiles

描述

allows configure <yandex><profiles>..</profiles></yandex> section in each `Pod` during generate `ConfigMap` which will mount in `/etc/clickhouse-server/users.d/` you can configure any aspect of settings profile More details: https://clickhouse.tech/docs/en/operations/settings/settings-profiles/ Your yaml code will convert to XML, see examples https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md#specconfigurationprofiles

类型

`object`

.spec.configuration.quotas

描述

allows configure <yandex><quotas>..</quotas></yandex> section in each `Pod` during generate `ConfigMap` which will mount in `/etc/clickhouse-server/users.d/` you can configure any aspect of resource quotas More details: https://clickhouse.tech/docs/en/operations/quotas/ Your yaml code will convert to XML, see examples https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md#specconfigurationquotas

类型

`object`

.spec.configuration.settings

描述

allows configure `clickhouse-server` settings inside <yandex>...</yandex> tag in each `Pod` during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` More details: https://clickhouse.tech/docs/en/operations/settings/settings/ Your yaml code will convert to XML, see examples https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md#specconfigurationsettings

类型

`object`

.spec.configuration.files

描述

allows define content of any setting file inside each `Pod` during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-server/users.d/` every key in this object is the file name every value in this object is the file content you can use `!!binary |` and base64 for binary files, see details here https://yaml.org/type/binary.html each key could contains prefix like USERS, COMMON, HOST or config.d, users.d, cond.d, wrong prefixes will ignored, subfolders also will ignored More details: https://github.com/Altinity/clickhouse-operator/blob/master/docs/chi-examples/05-settings-05-files-nested.yaml

类型

`object`

.spec.configuration.clusters

描述

describes ClickHouse clusters layout and allows change settings on cluster-level, shard-level and replica-level every cluster is a set of StatefulSet, one StatefulSet contains only one Pod with `clickhouse-server` all Pods will rendered in <remote_server> part of ClickHouse configs, mounted from ConfigMap as `/etc/clickhouse-server/config.d/chop-generated-remote_servers.xml` Clusters will use for Distributed table engine, more details: https://clickhouse.tech/docs/en/engines/table-engines/special/distributed/ If `cluster` contains zookeeper settings (could be inherited from top `chi` level), when you can create *ReplicatedMergeTree tables

类型

`array`

.spec.configuration.clusters[]

类型

`object`

属性	类型	描述
`name`	`string`	cluster name, used to identify set of ClickHouse servers and wide used during generate names of related Kubernetes resources
`zookeeper`	`object`	optional, allows configure .. section in each `Pod` only in current ClickHouse cluster, during generate `ConfigMap` which will mounted in `/etc/clickhouse-`

属性	类型	描述
		`server/config.d/` override top-level `chi.spec.configuration.zookeeper` settings
`settings`	`object`	optional, allows configure `clickhouse-server` settings inside ... tag in each `Pod` only in one cluster during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` override top-level `chi.spec.configuration.settings` More details: https://clickhouse.tech/docs/en/operations/settings/settings/ ↗
`files`	`object`	optional, allows define content of any setting file inside each `Pod` on current cluster during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-server/users.d/` override top-level `chi.spec.configuration.files`
`templates`	`object`	optional, configuration of the templates names which will use for generate Kubernetes resources according to selected cluster override top-level `chi.spec.configuration.templates`
`schemaPolicy`	`object`	describes how schema is propagated within replicas and shards

属性	类型	描述
`secret`	`object`	optional, shared secret value to secure cluster communications
`layout`	`object`	describe current cluster layout, how much shards in cluster, how much replica in shard allows override settings on each shard and replica separatelly

.spec.configuration.clusters[].zookeeper

描述

optional, allows configure <yandex><zookeeper>..</zookeeper></yandex> section in each `Pod` only in current ClickHouse cluster, during generate `ConfigMap` which will mounted in `/etc/clickhouse-server/config.d/` override top-level `chi.spec.configuration.zookeeper` settings

类型

`object`

属性	类型	描述
`nodes`	`array`	describe every available zookeeper cluster node for interaction
`session_timeout_ms`	`integer`	session timeout during connect to Zookeeper
`operation_timeout_ms`	`integer`	one operation timeout during Zookeeper transactions

属性	类型	描述
`root`	`string`	optional root znode path inside zookeeper to store ClickHouse related data (replication queue or distributed DDL)
`identity`	`string`	optional access credentials string with `user:password` format used when use digest authorization in Zookeeper

.spec.configuration.clusters[].zookeeper.nodes

描述

describe every available zookeeper cluster node for interaction

类型

`array`

.spec.configuration.clusters[].zookeeper.nodes[]

类型

`object`

属性	类型	描述
`host`	`string`	dns name or ip address for Zookeeper node
`port`	`integer`	TCP port which used to connect to Zookeeper node

.spec.configuration.clusters[].settings

描述

optional, allows configure `clickhouse-server` settings inside <yandex>...</yandex> tag in each `Pod` only in one cluster during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` override top-level `chi.spec.configuration.settings` More details: https://clickhouse.tech/docs/en/operations/settings/settings/

类型

`object`

.spec.configuration.clusters[].files

描述

optional, allows define content of any setting file inside each `Pod` on current cluster during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-server/users.d/` override top-level `chi.spec.configuration.files`

类型

`object`

.spec.configuration.clusters[].templates

描述

optional, configuration of the templates names which will use for generate Kubernetes resources according to selected cluster override top-level `chi.spec.configuration.templates`

类型

`object`

属性	类型	描述
`hostTemplate`	`string`	optional, template name from chi.spec.templates.hostTemplates, which will apply to configure every `clickhouse-`

属性	类型	描述
		`server` instance during render ConfigMap resources which will mount into `Pod`
`podTemplate`	`string`	optional, template name from chi.spec.templates.podTemplates, allows customization each `Pod` resource during render and reconcile each StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`dataVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse data directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`logVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse log directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`serviceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for one `Service` resource

属性	类型	描述
		which will created by `clickhouse-operator` which cover all clusters in whole `chi` resource
`clusterServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each clickhouse cluster described in `chi.spec.configuration.clusters`
`shardServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each shard inside clickhouse cluster described in `chi.spec.configuration.clusters`
`replicaServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each replica inside each shard inside each clickhouse cluster described in `chi.spec.configuration.clusters`

属性	类型	描述
`volumeClaimTemplate`	`string`	DEPRECATED! VolumeClaimTemplate is deprecated in favor of DataVolumeClaimTemplate and LogVolumeClaimTemplate

.spec.configuration.clusters[].schemaPolicy

描述

describes how schema is propagated within replicas and shards

类型

`object`

属性	类型	描述
`replica`	`string`	how schema is propagated within a replica
`shard`	`string`	how schema is propagated between shards

.spec.configuration.clusters[].secret

描述

optional, shared secret value to secure cluster communications

类型

`object`

属性	类型	描述
`auto`	`string`	Auto-generate shared secret value to secure cluster communications
`value`	`string`	Cluster shared secret value in plain text
`valueFrom`	`object`	Cluster shared secret source

.spec.configuration.clusters[].secret.valueFrom

描述

Cluster shared secret source

类型

`object`

属性	类型	描述
`secretKeyRef`	`object`	Selects a key of a secret in the clickhouse installation namespace. Should not be used if value is not empty.

.spec.configuration.clusters[].secret.valueFrom.secretKeyRef

描述

Selects a key of a secret in the clickhouse installation namespace. Should not be used if value is not empty.

类型

`object`

必填

`name` `key`

属性	类型	描述
`name`	`string`	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names ↗
`key`	`string`	The key of the secret to select from. Must be a valid secret key.
`optional`	`boolean`	Specify whether the Secret or its key must be defined

.spec.configuration.clusters[].layout

描述

describe current cluster layout, how much shards in cluster, how much replica in shard allows override settings on each shard and replica separatelly

类型

`object`

属性	类型	描述
`type`	`string`	DEPRECATED - to be removed soon
`shardsCount`	`integer`	how much shards for current ClickHouse cluster will run in Kubernetes, each shard contains shared-nothing part

属性	类型	描述
		of data and contains set of replicas, cluster contains 1 shard by default
`replicasCount`	`integer`	how much replicas in each shards for current ClickHouse cluster will run in Kubernetes, each replica is a separate `StatefulSet` which contains only one `Pod` with `clickhouse-server` instance, every shard contains 1 replica by default
`shards`	`array`	optional, allows override top-level `chi.spec.configuration`, cluster-level `chi.spec.configuration.clusters` settings for each shard separately, use it only if you fully understand what you do
`replicas`	`array`	optional, allows override top-level `chi.spec.configuration` and cluster-level `chi.spec.configuration.clusters` configuration for each replica and each shard relates to selected replica, use it only if you fully understand what you do

.spec.configuration.clusters[].layout.shards

描述

optional, allows override top-level `chi.spec.configuration`, cluster-level `chi.spec.configuration.clusters` settings for each shard separately, use it only if you fully understand what you do

类型

`array`

.spec.configuration.clusters[].layout.shards[]

类型

`object`

属性	类型	描述
`name`	`string`	optional, by default shard name is generated, but you override it and setup custom name
`definitionType`	`string`	DEPRECATED - to be removed soon
`weight`	`integer`	optional, 1 by default, allows setup shard setting which during insert into tables with `Distributed` engine, w <remote_servers> inside ConfigMap which will mount /etc/clickhouse-server/config.d/chop-generated-remote_servers.xml More details: https://clickhouse.tech/docs/en/engines/table-engines/special/distributed/ ↗
`internalReplication`	`string`	optional, `true` by default when `chi.spec.configuration.clusters[].layout.Repl` > 1 and 0 otherwise allows setup <internal_replication> which will use during insert into tables with `Distribut` engine for insert only in one live replica and other repli download inserted data during replication, will apply in <remote_servers> inside ConfigMap which will mount /etc/clickhouse-server/config.d/chop-generated-remote_servers.xml More details:

属性	类型	描述
		https://clickhouse.tech/docs/en/engines/table-engines/special/distributed/ ↗
`settings`	`object`	optional, allows configure `clickhouse-server` settin ... tag in each `Pod` only in one shard during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` override top-level `chi.spec.configuration.settings` and cluster-lev `chi.spec.configuration.clusters.settings` Mor https://clickhouse.tech/docs/en/operations/settings/sett
`files`	`object`	optional, allows define content of any setting file inside `Pod` only in one shard during generate `ConfigMap` mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/click server/users.d/` override top-level `chi.spec.configuration.files` and cluster-level `chi.spec.configuration.clusters.files`
`templates`	`object`	optional, configuration of the templates names which w generate Kubernetes resources according to selected override top-level `chi.spec.configuration.templat` cluster-level `chi.spec.configuration.clusters.te`
`replicasCount`	`integer`	optional, how much replicas in selected shard for selec ClickHouse cluster will run in Kubernetes, each replica separate `StatefulSet` which contains only one `Poc` `clickhouse-server` instance, shard contains 1 repli

属性	类型	描述
		default override cluster-level `chi.spec.configuration.clusters.layout.replic`
`replicas`	`array`	optional, allows override behavior for selected replicas cluster-level `chi.spec.configuration.clusters` ar level `chi.spec.configuration.clusters.layout.sh`

.spec.configuration.clusters[].layout.shards[].settings

描述

optional, allows configure `clickhouse-server` settings inside <yandex>...</yandex> tag in each `Pod` only in one shard during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` override top-level `chi.spec.configuration.settings` and cluster-level `chi.spec.configuration.clusters.settings` More details: https://clickhouse.tech/docs/en/operations/settings/settings/

类型

`object`

.spec.configuration.clusters[].layout.shards[].files

描述

optional, allows define content of any setting file inside each `Pod` only in one shard during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-server/users.d/` override top-level `chi.spec.configuration.files` and cluster-level `chi.spec.configuration.clusters.files`

类型

`object`

.spec.configuration.clusters[].layout.shards[].templates

描述

optional, configuration of the templates names which will use for generate Kubernetes resources according to selected shard override top-level `chi.spec.configuration.templates` and cluster-level `chi.spec.configuration.clusters.templates`

类型

`object`

属性	类型	描述
`hostTemplate`	`string`	optional, template name from chi.spec.templates.hostTemplates, which will apply to configure every `clickhouse-server` instance during render ConfigMap resources which will mount into `Pod`
`podTemplate`	`string`	optional, template name from chi.spec.templates.podTemplates, allows customization each `Pod` resource during render and reconcile each StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`dataVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse data directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`

属性	类型	描述
`logVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse log directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`serviceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for one `Service` resource which will created by `clickhouse-operator` which cover all clusters in whole `chi` resource
`clusterServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each clickhouse cluster described in `chi.spec.configuration.clusters`
`shardServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each shard inside

属性	类型	描述
		clickhouse cluster described in `chi.spec.configuration.clusters`
`replicaServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each replica inside each shard inside each clickhouse cluster described in `chi.spec.configuration.clusters`
`volumeClaimTemplate`	`string`	DEPRECATED! VolumeClaimTemplate is deprecated in favor of DataVolumeClaimTemplate and LogVolumeClaimTemplate

.spec.configuration.clusters[].layout.shards[].replicas

描述

optional, allows override behavior for selected replicas from cluster-level `chi.spec.configuration.clusters` and shard-level `chi.spec.configuration.clusters.layout.shards`

类型

`array`

.spec.configuration.clusters[].layout.shards[].replicas[]

类型

`object`

属性	类型	描述
`name`	`string`	optional, by default replica name is generated, but you and setup custom name
`secure`	`boolean`	optional, setup `secure` inside `clickhouse-server` each Pod where current template will apply if specified
`tcpPort`	`integer`	optional, setup `Pod.spec.containers.ports` with na selected replica, override `chi.spec.templates.hostTemplates.spec.tcpPort` connect to `clickhouse-server` via TCP Native proto kubernetes `Service`
`httpPort`	`integer`	optional, setup `Pod.spec.containers.ports` with na selected replica, override `chi.spec.templates.hostTemplates.spec.httpPor` connect to `clickhouse-server` via HTTP protocol vi `Service`
`interserverHTTPPort`	`integer`	optional, setup `Pod.spec.containers.ports` with na `interserver` for selected replica, override `chi.spec.templates.hostTemplates.spec.interse` allows connect between replicas inside same shard du replicated data parts HTTP protocol

属性	类型	描述
`settings`	`object`	optional, allows configure `clickhouse-server` settin in `Pod` only in one replica during generate `ConfigMa` mount in `/etc/clickhouse-server/conf.d/` overric `chi.spec.configuration.settings`, cluster-level `chi.spec.configuration.clusters.settings` and `chi.spec.configuration.clusters.layout.shards` More details: https://clickhouse.tech/docs/en/operations/settings/sett
`files`	`object`	optional, allows define content of any setting file inside one replica during generate `ConfigMap` which will mo `/etc/clickhouse-server/config.d/` or `/etc/cli server/conf.d/` or `/etc/clickhouse-server/user` top-level `chi.spec.configuration.files`, cluster-le `chi.spec.configuration.clusters.files` and sha `chi.spec.configuration.clusters.layout.shards`
`templates`	`object`	optional, configuration of the templates names which w generate Kubernetes resources according to selected top-level `chi.spec.configuration.templates`, clus `chi.spec.configuration.clusters.templates` an `chi.spec.configuration.clusters.layout.shards`

.spec.configuration.clusters[].layout.shards[].replicas[].settings

描述

optional, allows configure `clickhouse-server` settings inside <yandex>...</yandex> tag in `Pod` only in one replica during generate `ConfigMap` which will mount in `/etc/clickhouse-server/conf.d/` override top-level `chi.spec.configuration.settings`, cluster-level `chi.spec.configuration.clusters.settings` and shard-level `chi.spec.configuration.clusters.layout.shards.settings` More details: https://clickhouse.tech/docs/en/operations/settings/settings/

类型

`object`

.spec.configuration.clusters[].layout.shards[].replicas[].files

描述

optional, allows define content of any setting file inside `Pod` only in one replica during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-server/users.d/` override top-level `chi.spec.configuration.files`, cluster-level `chi.spec.configuration.clusters.files` and shard-level `chi.spec.configuration.clusters.layout.shards.files`

类型

`object`

.spec.configuration.clusters[].layout.shards[].replicas[].templates

描述

optional, configuration of the templates names which will use for generate Kubernetes resources according to selected replica override top-level `chi.spec.configuration.templates`, cluster-level `chi.spec.configuration.clusters.templates` and shard-level `chi.spec.configuration.clusters.layout.shards.templates`

类型

`object`

属性	类型	描述
`hostTemplate`	`string`	optional, template name from chi.spec.templates.hostTemplates, which will apply to configure every `clickhouse-server` instance during render ConfigMap resources which will mount into `Pod`
`podTemplate`	`string`	optional, template name from chi.spec.templates.podTemplates, allows customization each `Pod` resource during render and reconcile each StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`dataVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse data directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`logVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse log directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`

属性	类型	描述
`serviceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for one `Service` resource which will created by `clickhouse-operator` which cover all clusters in whole `chi` resource
`clusterServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each clickhouse cluster described in `chi.spec.configuration.clusters`
`shardServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each shard inside clickhouse cluster described in `chi.spec.configuration.clusters`
`replicaServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each replica inside each shard inside each clickhouse cluster

属性	类型	描述
		described in `chi.spec.configuration.clusters`
`volumeClaimTemplate`	`string`	DEPRECATED! VolumeClaimTemplate is deprecated in favor of DataVolumeClaimTemplate and LogVolumeClaimTemplate

.spec.configuration.clusters[].layout.replicas

描述

optional, allows override top-level `chi.spec.configuration` and cluster-level `chi.spec.configuration.clusters` configuration for each replica and each shard relates to selected replica, use it only if you fully understand what you do

类型

`array`

.spec.configuration.clusters[].layout.replicas[]

类型

`object`

属性	类型	描述
`name`	`string`	optional, by default replica name is generated, but you can override it and setup custom name
`settings`	`object`	optional, allows configure `clickhouse-server` settings inside tag in `Pod` only in one replica during generate `ConfigMap`

属性	类型	描述
		which will mount in `/etc/clickhouse-server/conf.d/` overri top-level `chi.spec.configuration.settings`, cluster-level `chi.spec.configuration.clusters.settings` and will ignor if shard-level `chi.spec.configuration.clusters.layout.shards` present More details: https://clickhouse.tech/docs/en/operations/settings/settings/ ↗
`files`	`object`	optional, allows define content of any setting file inside each `Pod` only in one replica during generate `ConfigMap` which wi mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-server/users.d/` override top-level `chi.spec.configuration.files` and cluster-level `chi.spec.configuration.clusters.files`, will ignore if `chi.spec.configuration.clusters.layout.shards` present
`templates`	`object`	optional, configuration of the templates names which will use for generate Kubernetes resources according to selected replica override top-level `chi.spec.configuration.templates`, cluster-level `chi.spec.configuration.clusters.templates`
`shardsCount`	`integer`	optional, count of shards related to current replica, you can override each shard behavior on low-level `chi.spec.configuration.clusters.layout.replicas.sharc`

属性	类型	描述
`shards`	`array`	optional, list of shards related to current replica, will ignore if `chi.spec.configuration.clusters.layout.shards` present

.spec.configuration.clusters[].layout.replicas[].settings

描述

optional, allows configure `clickhouse-server` settings inside <yandex>...</yandex> tag in `Pod` only in one replica during generate `ConfigMap` which will mount in `/etc/clickhouse-server/conf.d/` override top-level `chi.spec.configuration.settings`, cluster-level `chi.spec.configuration.clusters.settings` and will ignore if shard-level `chi.spec.configuration.clusters.layout.shards` present More details: https://clickhouse.tech/docs/en/operations/settings/settings/

类型

`object`

.spec.configuration.clusters[].layout.replicas[].files

描述

optional, allows define content of any setting file inside each `Pod` only in one replica during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-server/users.d/` override top-level `chi.spec.configuration.files` and cluster-level `chi.spec.configuration.clusters.files`, will ignore if `chi.spec.configuration.clusters.layout.shards` presents

类型

`object`

.spec.configuration.clusters[].layout.replicas[].templates

描述

optional, configuration of the templates names which will use for generate Kubernetes resources according to selected replica override top-level `chi.spec.configuration.templates`, cluster-level `chi.spec.configuration.clusters.templates`

类型

`object`

属性	类型	描述
`hostTemplate`	`string`	optional, template name from chi.spec.templates.hostTemplates, which will apply to configure every `clickhouse-server` instance during render ConfigMap resources which will mount into `Pod`
`podTemplate`	`string`	optional, template name from chi.spec.templates.podTemplates, allows customization each `Pod` resource during render and reconcile each StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`dataVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse data directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`logVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates,

属性	类型	描述
		allows customization each `PVC` which will mount for clickhouse log directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`serviceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for one `Service` resource which will created by `clickhouse-operator` which cover all clusters in whole `chi` resource
`clusterServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each clickhouse cluster described in `chi.spec.configuration.clusters`
`shardServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each shard inside clickhouse cluster described in `chi.spec.configuration.clusters`

属性	类型	描述
`replicaServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each replica inside each shard inside each clickhouse cluster described in `chi.spec.configuration.clusters`
`volumeClaimTemplate`	`string`	DEPRECATED! VolumeClaimTemplate is deprecated in favor of DataVolumeClaimTemplate and LogVolumeClaimTemplate

.spec.configuration.clusters[].layout.replicas[].shards

描述

optional, list of shards related to current replica, will ignore if `chi.spec.configuration.clusters.layout.shards` presents

类型

`array`

.spec.configuration.clusters[].layout.replicas[].shards[]

类型

`object`

属性	类型	描述
`name`	`string`	optional, by default shard name is generated, but you c and setup custom name
`secure`	`boolean`	optional, setup `secure` inside `clickhouse-server` each Pod where current template will apply if specified
`tcpPort`	`integer`	optional, setup `Pod.spec.containers.ports` with na selected shard, override `chi.spec.templates.hostTemplates.spec.tcpPort` connect to `clickhouse-server` via TCP Native proto kubernetes `Service`
`httpPort`	`integer`	optional, setup `Pod.spec.containers.ports` with na selected shard, override `chi.spec.templates.hostTemplates.spec.httpPor` connect to `clickhouse-server` via HTTP protocol vi `Service`
`interserverHTTPPort`	`integer`	optional, setup `Pod.spec.containers.ports` with na `interserver` for selected shard, override `chi.spec.templates.hostTemplates.spec.interse` allows connect between replicas inside same shard du replicated data parts HTTP protocol
`settings`	`object`	optional, allows configure `clickhouse-server` settin in `Pod` only in one shard related to current replica du

属性	类型	描述
		`ConfigMap` which will mount in `/etc/clickhouse-server/conf.d/` override top-level `chi.spec.configuration.settings`, cluster-level `chi.spec.configuration.clusters.settings` and `chi.spec.configuration.clusters.layout.replic` More details: https://clickhouse.tech/docs/en/operations/settings/sett
`files`	`object`	optional, allows define content of any setting file inside only in one shard related to current replica during gene `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/co` `/etc/clickhouse-server/users.d/` override top-le `chi.spec.configuration.files` and cluster-level `chi.spec.configuration.clusters.files`, will ign `chi.spec.configuration.clusters.layout.shards`
`templates`	`object`	optional, configuration of the templates names which w generate Kubernetes resources according to selected top-level `chi.spec.configuration.templates`, clus `chi.spec.configuration.clusters.templates`, re `chi.spec.configuration.clusters.layout.replic`

.spec.configuration.clusters[].layout.replicas[].shards[].settings

描述

optional, allows configure `clickhouse-server` settings inside <yandex>...</yandex> tag in `Pod` only in one shard related to current replica during generate `ConfigMap` which will

mount in `/etc/clickhouse-server/conf.d/` override top-level `chi.spec.configuration.settings`, cluster-level `chi.spec.configuration.clusters.settings` and replica-level `chi.spec.configuration.clusters.layout.replicas.settings` More details: https://clickhouse.tech/docs/en/operations/settings/settings/

类型

`object`

.spec.configuration.clusters[].layout.replicas[].shards[].files

描述

optional, allows define content of any setting file inside each `Pod` only in one shard related to current replica during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-server/users.d/` override top-level `chi.spec.configuration.files` and cluster-level `chi.spec.configuration.clusters.files`, will ignore if `chi.spec.configuration.clusters.layout.shards` presents

类型

`object`

.spec.configuration.clusters[].layout.replicas[].shards[].templates

描述

optional, configuration of the templates names which will use for generate Kubernetes resources according to selected replica override top-level `chi.spec.configuration.templates`, cluster-level `chi.spec.configuration.clusters.templates`, replica-level `chi.spec.configuration.clusters.layout.replicas.templates`

类型

`object`

属性	类型	描述
`hostTemplate`	`string`	optional, template name from chi.spec.templates.hostTemplates, which will apply to configure every `clickhouse-server` instance during render ConfigMap resources which will mount into `Pod`
`podTemplate`	`string`	optional, template name from chi.spec.templates.podTemplates, allows customization each `Pod` resource during render and reconcile each StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`dataVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse data directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`logVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse log directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`

属性	类型	描述
`serviceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for one `Service` resource which will created by `clickhouse-operator` which cover all clusters in whole `chi` resource
`clusterServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each clickhouse cluster described in `chi.spec.configuration.clusters`
`shardServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each shard inside clickhouse cluster described in `chi.spec.configuration.clusters`
`replicaServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each replica inside each shard inside each clickhouse cluster

属性	类型	描述
		described in `chi.spec.configuration.clusters`
`volumeClaimTemplate`	`string`	DEPRECATED! VolumeClaimTemplate is deprecated in favor of DataVolumeClaimTemplate and LogVolumeClaimTemplate

.spec.templates

描述

allows define templates which will use for render Kubernetes resources like StatefulSet, ConfigMap, Service, PVC, by default, clickhouse-operator have own templates, but you can override it

类型

`object`

属性	类型	描述
`hostTemplates`	`array`	hostTemplate will use during apply to generate `clic`
`podTemplates`	`array`	podTemplate will use during render `Pod` inside `Sta` rendered `Pod.spec`, pod scheduling distribution and https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explaine ↗

属性	类型	描述
`volumeClaimTemplates`	`array`	allows define template for rendering `PVC` kubernete `Pod` for mount clickhouse `data`, clickhouse `logs`
`serviceTemplates`	`array`	allows define template for rendering `Service` which which scoped chi-wide, cluster-wide, shard-wide, repl

.spec.templates.hostTemplates

描述

hostTemplate will use during apply to generate `clickhose-server` config files

类型

`array`

.spec.templates.hostTemplates[]

类型

`object`

属性	类型	描述

`name`	`string`	template name, could use to link inside top-level
		`chi.spec.defaults.templates.hostTemplate`, cluster-
		`chi.spec.configuration.clusters.templates.hostTe`
		`chi.spec.configuration.clusters.layout.shards.te`
		replica-level
		`chi.spec.configuration.clusters.layout.replicas.`

属性	类型	描述
`portDistribution`	`array`	define how will distribute numeric values of named ports ir `Pod.spec.containers.ports` and clickhouse-server co
`spec`	`object`	

.spec.templates.hostTemplates[].portDistribution

描述

define how will distribute numeric values of named ports in `Pod.spec.containers.ports` and clickhouse-server configs

类型

`array`

.spec.templates.hostTemplates[].portDistribution[]

类型

`object`

属性	类型	描述
`type`	`string`	type of distribution, when `Unspecified` (default value) then all listen ports on clickhouse-server configuration in all Pods will have the same value, when `ClusterScopeIndex` then ports will increment to offset from base value depends on shard and replica index inside cluster with combination of `chi.spec.templates.podTemlates.spec.HostNetwork` it allows setup ClickHouse cluster inside Kubernetes and provide access via external network bypass Kubernetes internal network

.spec.templates.hostTemplates[].spec

类型

`object`

属性	类型	描述
`name`	`string`	by default, hostname will generate, but this allows defi `clickhuse-server`
`secure`	`boolean`	optional, setup `secure` inside `clickhouse-server` current template will apply if specified

属性	类型	描述
`tcpPort`	`integer`	optional, setup `tcp_port` inside `clickhouse-serve` current template will apply if specified, should have equ `chi.spec.templates.podTemplates.spec.containe` info: https://clickhouse.tech/docs/en/interfaces/tcp/ ↗
`httpPort`	`integer`	optional, setup `http_port` inside `clickhouse-serv` current template will apply if specified, should have equ `chi.spec.templates.podTemplates.spec.containe` info: https://clickhouse.tech/docs/en/interfaces/http/ ↗
`interserverHTTPPort`	`integer`	optional, setup `interserver_http_port` inside `cli` each Pod where current template will apply if specified `chi.spec.templates.podTemplates.spec.containe` More info: https://clickhouse.tech/docs/en/operations/s parameters/settings/#interserver-http-port ↗
`settings`	`object`	optional, allows configure `clickhouse-server` settin where this template will apply during generate `Config` `/etc/clickhouse-server/conf.d/` More details: https://clickhouse.tech/docs/en/operations/settings/sett
`files`	`object`	optional, allows define content of any setting file inside template will apply during generate `ConfigMap` which `/etc/clickhouse-server/config.d/` or `/etc/cli` `/etc/clickhouse-server/users.d/`

属性	类型	描述
`templates`	`object`	be careful, this part of CRD allows override template in don't understand what you do

.spec.templates.hostTemplates[].spec.settings

描述

optional, allows configure `clickhouse-server` settings inside <yandex>...</yandex> tag in each `Pod` where this template will apply during generate `ConfigMap` which will mount in `/etc/clickhouse-server/conf.d/` More details: https://clickhouse.tech/docs/en/operations/settings/settings/

类型

`object`

.spec.templates.hostTemplates[].spec.files

描述

optional, allows define content of any setting file inside each `Pod` where this template will apply during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-server/users.d/`

类型

`object`

.spec.templates.hostTemplates[].spec.templates

描述

be careful, this part of CRD allows override template inside template, don't use it if you don't understand what you do

类型

`object`

属性	类型	描述
`hostTemplate`	`string`	optional, template name from chi.spec.templates.hostTemplates, which will apply to configure every `clickhouse-server` instance during render ConfigMap resources which will mount into `Pod`
`podTemplate`	`string`	optional, template name from chi.spec.templates.podTemplates, allows customization each `Pod` resource during render and reconcile each StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`dataVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse data directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`logVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse log directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`

属性	类型	描述
`serviceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for one `Service` resource which will created by `clickhouse-operator` which cover all clusters in whole `chi` resource
`clusterServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each clickhouse cluster described in `chi.spec.configuration.clusters`
`shardServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each shard inside clickhouse cluster described in `chi.spec.configuration.clusters`
`replicaServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each replica inside each shard inside each clickhouse cluster

属性	类型	描述
		described in `chi.spec.configuration.clusters`
`volumeClaimTemplate`	`string`	DEPRECATED! VolumeClaimTemplate is deprecated in favor of DataVolumeClaimTemplate and LogVolumeClaimTemplate

.spec.templates.podTemplates

描述

podTemplate will use during render `Pod` inside `StatefulSet.spec` and allows define rendered `Pod.spec`, pod scheduling distribution and pod zone More information: https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md#spectemplatespodtemplates

类型

`array`

.spec.templates.podTemplates[]

类型

`object`

属性	类型	描述
`name`	`string`	template name, could use to link inside top-level `chi.spec.defaults.templates.podTemplate`, cluster-le `chi.spec.configuration.clusters.templates.podTemp` `chi.spec.configuration.clusters.layout.shards.tem` level `chi.spec.configuration.clusters.layout.repli`
`generateName`	`string`	allows define format for generated `Pod` name, look to https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md ↗ for details about aviailable template variables
`zone`	`object`	allows define custom zone name and will separate ClickHo shortcut for `chi.spec.templates.podTemplates.spec.af`
`distribution`	`string`	DEPRECATED, shortcut for `chi.spec.templates.podTemplates.spec.affinity.pod`
`podDistribution`	`array`	define ClickHouse Pod distibution policy between Kubernet Namespace, CHI, another ClickHouse cluster
`spec`	`object`	allows define whole Pod.spec inside StaefulSet.spec, look https://kubernetes.io/docs/concepts/workloads/pods/#pod-t
`metadata`	`ObjectMeta ↗`	allows pass standard object's metadata from template to P https://git.k8s.io/community/contributors/devel/sig-architect

属性	类型	描述
		conventions.md#metadata ↗

.spec.templates.podTemplates[].zone

描述

allows define custom zone name and will separate ClickHouse `Pods` between nodes, shortcut for `chi.spec.templates.podTemplates.spec.affinity.podAntiAffinity`

类型

`object`

属性	类型	描述
`key`	`string`	optional, if defined, allows select kubernetes nodes by label with `name` equal `key`
`values`	`array`	optional, if defined, allows select kubernetes nodes by label with `value` in `values`

.spec.templates.podTemplates[].zone.values

描述

optional, if defined, allows select kubernetes nodes by label with `value` in `values`

类型

`array`

.spec.templates.podTemplates[].zone.values[]

类型

`string`

.spec.templates.podTemplates[].podDistribution

描述

define ClickHouse Pod distibution policy between Kubernetes Nodes inside Shard, Replica, Namespace, CHI, another ClickHouse cluster

类型

`array`

.spec.templates.podTemplates[].podDistribution[]

类型

`object`

属性	类型	描述
`type`	`string`	you can define multiple affinity policy types
`scope`	`string`	scope for apply each podDistribution
`number`	`integer`	define, how much ClickHouse Pods could be inside selected sc
`topologyKey`	`string`	use for inter-pod affinity look to `pod.spec.affinity.podAntiAffinity.preferredDuringSche` More info: https://kubernetes.io/docs/concepts/scheduling-evicti

.spec.templates.podTemplates[].spec

描述

allows define whole Pod.spec inside StaefulSet.spec, look to https://kubernetes.io/docs/concepts/workloads/pods/#pod-templates for details

类型

`object`

.spec.templates.volumeClaimTemplates

描述

allows define template for rendering `PVC` kubernetes resource, which would use inside `Pod` for mount clickhouse `data`, clickhouse `logs` or something else

类型

`array`

.spec.templates.volumeClaimTemplates[]

类型

`object`

属性	类型	描述
`name`	`string`	template name, could use to link inside top-level `chi.spec.defaults.templates.dataVolumeClaimTemplate` `chi.spec.defaults.templates.logVolumeClaimTemplate` `chi.spec.configuration.clusters.templates.dataVolum` `chi.spec.configuration.clusters.templates.logVolume` `chi.spec.configuration.clusters.layout.shards.temla` `chi.spec.configuration.clusters.layout.shards.temla` replica-level `chi.spec.configuration.clusters.layout.replicas.tem` or `chi.spec.configuration.clusters.layout.replicas.tem`

属性	类型	描述
`provisioner`	`string`	defines `PVC` provisioner - be it StatefulSet or the Operator
`reclaimPolicy`	`string`	defines behavior of `PVC` deletion. `Delete` by default, if `Re` kept when deleting StatefulSet
`metadata`	`ObjectMeta↗`	allows to pass standard object's metadata from template to P https://git.k8s.io/community/contributors/devel/sig-architecture
`spec`	`object`	allows define all aspects of `PVC` resource More info: https://kubernetes.io/docs/concepts/storage/persistent-volum

.spec.templates.volumeClaimTemplates[].spec

描述

allows define all aspects of `PVC` resource More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes/#persistentvolumeclaims

类型

`object`

.spec.templates.serviceTemplates

描述

allows define template for rendering `Service` which would get endpoint from Pods which scoped chi-wide, cluster-wide, shard-wide, replica-wide level

类型

`array`

.spec.templates.serviceTemplates[]

类型

`object`

属性	类型	描述
`name`	`string`	template name, could use to link inside chi-level `chi.spec.defaults.templates.serviceTemplate` cluster-l `chi.spec.configuration.clusters.templates.clusterSer` `chi.spec.configuration.clusters.layout.shards.temlat` replica-level `chi.spec.configuration.clusters.layout.replicas.temp` or `chi.spec.configuration.clusters.layout.shards.rep`
`generateName`	`string`	allows define format for generated `Service` name, look to https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md#sp details about aviailable template variables
`metadata`	`ObjectMeta↗`	allows pass standard object's metadata from template to Servi specificly for Cloud Provider metadata which impact to behavic https://kubernetes.io/docs/concepts/services-networking/servic
`spec`	`object`	describe behavior of generated Service More info: https://kube networking/service/↗

.spec.templates.serviceTemplates[].spec

描述

describe behavior of generated Service More info: https://kubernetes.io/docs/concepts/services-networking/service/

类型

`object`

.spec.useTemplates

描述

list of `ClickHouseInstallationTemplate` (chit) resource names which will merge with current `Chi` manifest during render Kubernetes resources to create related ClickHouse clusters

类型

`array`

.spec.useTemplates[]

类型

`object`

属性	类型	描述
`name`	`string`	name of `ClickHouseInstallationTemplate` (chit) resource
`namespace`	`string`	Kubernetes namespace where need search `chit` resource, depending on `watchNamespaces` settings in `clichouse-operator`
`useType`	`string`	optional, current strategy is only merge, and current `chi` settings have more priority than merged template `chit`

API 端点

可用的 API 端点如下：

- `/apis/clickhouse.altinity.com/v1/namespaces/{namespace}/clickhouseinstallations`
  - `DELETE`: delete collection of ClickHouseInstallation
  - `GET`: list objects of kind ClickHouseInstallation
  - `POST`: create a new ClickHouseInstallation
- `/apis/clickhouse.altinity.com/v1/namespaces/{namespace}/clickhouseinstallations/{name}`
  - `DELETE`: delete the specified ClickHouseInstallation
  - `GET`: read the specified ClickHouseInstallation
  - `PATCH`: partially update the specified ClickHouseInstallation
  - `PUT`: replace the specified ClickHouseInstallation
- `/apis/clickhouse.altinity.com/v1/namespaces/{namespace}/clickhouseinstallations/{name}/status`
  - `GET`: read status of the specified ClickHouseInstallation
  - `PATCH`: partially update status of the specified ClickHouseInstallation
  - `PUT`: replace status of the specified ClickHouseInstallation

/apis/clickhouse.altinity.com/v1/namespaces/{namespace}/clickhouseinstallations

HTTP 方法

`DELETE`

描述

delete collection of ClickHouseInstallation

HTTP 响应

HTTP 状态码	响应体
200 - OK	`Status` schema
401 - Unauthorized	Empty

HTTP 方法

`GET`

描述

list objects of kind ClickHouseInstallation

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseInstallationList` schema
401 - Unauthorized	Empty

HTTP 方法

`POST`

描述

create a new ClickHouseInstallation

查询参数

参数	类型	描述
`dryRun`	`string`	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
`fieldValidation`	`string`	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last

参数	类型	描述
		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.

请求体参数

参数	类型	描述
`body`	`ClickHouseInstallation` schema	`application/json` formatted

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseInstallation` schema
201 - Created	`ClickHouseInstallation` schema
202 - Accepted	`ClickHouseInstallation` schema
401 - Unauthorized	Empty

/apis/clickhouse.altinity.com/v1/namespaces/{namespace}/clickhouseinstallations/{name}

HTTP 方法

`DELETE`

描述

delete the specified ClickHouseInstallation

查询参数

参数	类型	描述
`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 响应

HTTP 状态码	响应体
200 - OK	`Status↗` schema
202 - Accepted	`Status↗` schema
401 - Unauthorized	Empty

HTTP 方法

`GET`

描述

read the specified ClickHouseInstallation

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseInstallation` schema
401 - Unauthorized	Empty

HTTP 方法

`PATCH`

描述

partially update the specified ClickHouseInstallation

查询参数

参数	类型	描述
`dryRun`	`string`	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
`fieldValidation`	`string`	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseInstallation` schema
401 - Unauthorized	Empty

HTTP 方法

`PUT`

描述

replace the specified ClickHouseInstallation

查询参数

参数	类型	描述
`dryRun`	`string`	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
`fieldValidation`	`string`	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

请求体参数

参数	类型	描述
`body`	`ClickHouseInstallation` schema	`application/json` formatted

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseInstallation` schema
201 - Created	`ClickHouseInstallation` schema
401 - Unauthorized	Empty

/apis/clickhouse.altinity.com/v1/namespaces/{namespace}/clickhouseinstallations/{name}/status

HTTP 方法

`GET`

描述

read status of the specified ClickHouseInstallation

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseInstallation` schema
401 - Unauthorized	Empty

HTTP 方法

`PATCH`

描述

partially update status of the specified ClickHouseInstallation

查询参数

参数	类型	描述
`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

参数	类型	描述
		processing of the request. Valid values are: - All: all dry run stages will be processed
`fieldValidation`	`string`	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseInstallation` schema
401 - Unauthorized	Empty

HTTP 方法

`PUT`

描述

replace status of the specified ClickHouseInstallation

查询参数

参数	类型	描述
`dryRun`	`string`	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
`fieldValidation`	`string`	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

请求体参数

参数	类型	描述
`body`	`ClickHouseInstallation` schema	`application/json` formatted

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseInstallation` schema
201 - Created	`ClickHouseInstallation` schema

HTTP 状态码	响应体
401 - Unauthorized	Empty

ClickHouseInstallationTemplates

描述

define a set of Kubernetes resources (StatefulSet, PVC, Service, ConfigMap) which describe behavior one or more ClickHouse clusters

类型

`object`

必填

`spec`

规格

属性	类型	描述
`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

属性	类型	描述
		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.
`status`	`object`	Current ClickHouseInstallation manifest status, contains many fields like a normalized configuration, clickhouse-operator version, current action and all applied action list, current taskID and all applied taskIDs and other
`spec`	`object`	Specification of the desired behavior of one or more ClickHouse clusters More info: https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md ↗

.status

描述

Current ClickHouseInstallation manifest status, contains many fields like a normalized configuration, clickhouse-operator version, current action and all applied action list, current taskID and all applied taskIDs and other

类型

`object`

属性	类型	描述
`chop-version`	`string`	ClickHouse operator version
`chop-commit`	`string`	ClickHouse operator git commit SHA
`chop-date`	`string`	ClickHouse operator build date
`chop-ip`	`string`	IP address of the operator's pod which managed this CHI
`clusters`	`integer`	Clusters count
`shards`	`integer`	Shards count
`replicas`	`integer`	Replicas count
`hosts`	`integer`	Hosts count
`status`	`string`	Status
`taskID`	`string`	Current task id

属性	类型	描述
`taskIDsStarted`	`array`	Started task ids
`taskIDsCompleted`	`array`	Completed task ids
`action`	`string`	Action
`actions`	`array`	Actions
`error`	`string`	Last error
`errors`	`array`	Errors
`updated`	`integer`	Updated Hosts count
`added`	`integer`	Added Hosts count
`deleted`	`integer`	Deleted Hosts count
`delete`	`integer`	About to delete Hosts count

属性	类型	描述
`pods`	`array`	Pods
`pod-ips`	`array`	Pod IPs
`fqdns`	`array`	Pods FQDNs
`endpoint`	`string`	Endpoint
`generation`	`integer`	Generation
`normalized`	`object`	Normalized CHI requested
`normalizedCompleted`	`object`	Normalized CHI completed

.status.taskIDsStarted

描述

Started task ids

类型

`array`

.status.taskIDsStarted[]

类型

`string`

.status.taskIDsCompleted

描述

Completed task ids

类型

`array`

.status.taskIDsCompleted[]

类型

`string`

.status.actions

描述

Actions

类型

`array`

.status.actions[]

类型

`string`

.status.errors

描述

Errors

类型

`array`

.status.errors[]

类型

`string`

.status.pods

描述

Pods

类型

`array`

.status.pods[]

类型

`string`

.status.pod-ips

描述

Pod IPs

类型

`array`

.status.pod-ips[]

类型

`string`

.status.fqdns

描述

Pods FQDNs

类型

`array`

.status.fqdns[]

类型

`string`

.status.normalized

描述

Normalized CHI requested

类型

`object`

.status.normalizedCompleted

描述

Normalized CHI completed

类型

`object`

.spec

描述

Specification of the desired behavior of one or more ClickHouse clusters More info: https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md

类型

`object`

属性	类型	描述
`taskID`	`string`	Allows to define custom taskID for named update o status of this update execution in .status.taskIDs fie update of chi manifest will generate random taskID
`stop`	`string`	Allow stop all ClickHouse clusters described in curr mechanism works as follows: • When `stop` is `1` then setup `Replicas: 0` current `chi` StatefulSet resource, all `Pods` a resources will desctroy, but PVCs still live • When `stop` is `0` then `Pods` will created ag retained PVCs and `Service` also will created
`restart`	`string`	This is a 'soft restart' button. When set to 'RollingU restart ClickHouse pods in a graceful way. Remove order to avoid unneeded restarts
`troubleshoot`	`string`	allows troubleshoot Pods during CrashLoopBack st wrong configuration, `clickhouse-server` wouldr
`namespaceDomainPattern`	`string`	custom domain suffix which will add to end of `Ser` use it when you use custom cluster domain in your

属性	类型	描述
`templating`	`object`	optional, define policy for auto applying ClickHouse inside ClickHouseInstallation
`reconciling`	`object`	optional, allows tuning reconciling cycle for Clickho clickhouse-operator side
`defaults`	`object`	define default behavior for whole ClickHouseInstall can be re-define on cluster, shard and replica level https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_expla ↗
`configuration`	`object`	allows configure multiple aspects and behavior for `server` instance and also allows describe multiple `server` clusters inside one `chi` resource
`templates`	`object`	allows define templates which will use for render Ku like StatefulSet, ConfigMap, Service, PVC, by defa operator have own templates, but you can override
`useTemplates`	`array`	list of `ClickHouseInstallationTemplate` (chit) r will merge with current `Chi` manifest during rende resources to create related ClickHouse clusters

.spec.templating

描述

optional, define policy for auto applying ClickHouseInstallationTemplate inside ClickHouseInstallation

类型

`object`

属性	类型	描述
`policy`	`string`	when defined as `auto` inside ClickhouseInstallationTemplate, it will auto add into all ClickHouseInstallation, manual value is default

.spec.reconciling

描述

optional, allows tuning reconciling cycle for ClickhouseInstallation from clickhouse-operator side

类型

`object`

属性	类型	描述
`policy`	`string`	DEPRECATED
`configMapPropagationTimeout`	`integer`	timeout in seconds when `clickhouse-opera` applied `ConfigMap` during reconcile `Click` pods will updated from cache see details: https://kubernetes.io/docs/concepts/configura configmaps-are-updated-automatically ↗

属性	类型	描述
`cleanup`	`object`	optional, define behavior for cleanup Kuberne reconcile cycle

.spec.reconciling.cleanup

描述

optional, define behavior for cleanup Kubernetes resources during reconcile cycle

类型

`object`

属性	类型	描述
`unknownObjects`	`object`	what clickhouse-operator shall do when found Kubernetes resources which should be managed with clickhouse-operator, but not have `ownerReference` to any currently managed `ClickHouseInstallation` resource, default behavior is `Delete`
`reconcileFailedObjects`	`object`	what clickhouse-operator shall do when reconciling Kubernetes resources are failed, default behavior is `Retain`

.spec.reconciling.cleanup.unknownObjects

描述

what clickhouse-operator shall do when found Kubernetes resources which should be managed with clickhouse-operator, but not have `ownerReference` to any currently

managed `ClickHouseInstallation` resource, default behavior is `Delete`

类型

`object`

属性	类型	描述
`statefulSet`	`string`	behavior policy for unknown StatefulSet, Delete by default
`pvc`	`string`	behavior policy for unknown PVC, Delete by default
`configMap`	`string`	behavior policy for unknown ConfigMap, Delete by default
`service`	`string`	behavior policy for unknown Service, Delete by default

.spec.reconciling.cleanup.reconcileFailedObjects

描述

what clickhouse-operator shall do when reconciling Kubernetes resources are failed, default behavior is `Retain`

类型

`object`

属性	类型	描述
`statefulSet`	`string`	behavior policy for failed StatefulSet reconciling, Retain by default

属性	类型	描述
`pvc`	`string`	behavior policy for failed PVC reconciling, Retain by default
`configMap`	`string`	behavior policy for failed ConfigMap reconciling, Retain by default
`service`	`string`	behavior policy for failed Service reconciling, Retain by default

.spec.defaults

描述

define default behavior for whole ClickHouseInstallation, some behavior can be re-define on cluster, shard and replica level More info: https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md#specdefaults

类型

`object`

属性	类型	描述
`replicasUseFQDN`	`string`	define should replicas be specified by FQDN in `<host></host>`. In case of "no" will use short hostname and clickhouse-server will use kubernetes default suffixes for DNS lookup "yes" by default

属性	类型	描述
`distributedDDL`	`object`	allows change `<yandex><distributed_ddl></distributed_ddl></yandex>` settings More info: https://clickhouse.tech/docs/en/operations/server-configuration-parameters/settings/#server-settings-distributed_ddl ↗
`storageManagement`	`object`	default storage management options
`templates`	`object`	optional, configuration of the templates names which will use for generate Kubernetes resources according to one or more ClickHouse clusters described in current ClickHouseInstallation (chi) resource

.spec.defaults.distributedDDL

描述

allows change `<yandex><distributed_ddl></distributed_ddl></yandex>` settings More info: https://clickhouse.tech/docs/en/operations/server-configuration-parameters/settings/#server-settings-distributed_ddl

类型

`object`

属性	类型	描述
`profile`	`string`	Settings from this profile will be used to execute DDL queries

.spec.defaults.storageManagement

描述

default storage management options

类型

`object`

属性	类型	描述
`provisioner`	`string`	defines `PVC` provisioner - be it StatefulSet or the Operator
`reclaimPolicy`	`string`	defines behavior of `PVC` deletion. `Delete` by default, if `Retain` specified then `PVC` will be kept when deleting StatefulSet

.spec.defaults.templates

描述

optional, configuration of the templates names which will use for generate Kubernetes resources according to one or more ClickHouse clusters described in current ClickHouseInstallation (chi) resource

类型

`object`

属性	类型	描述
`hostTemplate`	`string`	optional, template name from chi.spec.templates.hostTemplates, which will apply to configure every `clickhouse-`

属性	类型	描述
		`server` instance during render ConfigMap resources which will mount into `Pod`
`podTemplate`	`string`	optional, template name from chi.spec.templates.podTemplates, allows customization each `Pod` resource during render and reconcile each StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`dataVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse data directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`logVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse log directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`serviceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for one `Service` resource

属性	类型	描述
		which will created by `clickhouse-operator` which cover all clusters in whole `chi` resource
`clusterServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each clickhouse cluster described in `chi.spec.configuration.clusters`
`shardServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each shard inside clickhouse cluster described in `chi.spec.configuration.clusters`
`replicaServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each replica inside each shard inside each clickhouse cluster described in `chi.spec.configuration.clusters`

属性	类型	描述
`volumeClaimTemplate`	`string`	DEPRECATED! VolumeClaimTemplate is deprecated in favor of DataVolumeClaimTemplate and LogVolumeClaimTemplate

.spec.configuration

描述

allows configure multiple aspects and behavior for `clickhouse-server` instance and also allows describe multiple `clickhouse-server` clusters inside one `chi` resource

类型

`object`

属性	类型	描述
`zookeeper`	`object`	allows configure .. section in each `Pod` during generate `Confi` mounted in `/etc/clickhouse-server/config.d/` `clickhous` doesn't manage Zookeeper, please install Zookeeper separatelly https://github.com/Altinity/clickhouse-operator/tree/master/deplo currently, zookeeper (or clickhouse-keeper replacement) used fo *ReplicatedMergeTree table engines and for `distributed_ddl` https://clickhouse.tech/docs/en/operations/server-configuration-parameters/settings/#server-settings_zookeeper ↗
`users`	`object`	allows configure .. section in each `Pod` during generate `Confi` mount in `/etc/clickhouse-server/users.d/` you can config hashed, authorization restrictions, database level security row fil https://clickhouse.tech/docs/en/operations/settings/settings-user

属性	类型	描述
		will convert to XML, see examples https://github.com/Altinity/clic operator/blob/master/docs/custom_resource_explained.md#spe
`profiles`	`object`	allows configure .. section in each `Pod` during generate `Conf` mount in `/etc/clickhouse-server/users.d/` you can config settings profile More details: https://clickhouse.tech/docs/en/operations/settings/settings-profi will convert to XML, see examples https://github.com/Altinity/clic operator/blob/master/docs/custom_resource_explained.md#spe ↗
`quotas`	`object`	allows configure .. section in each `Pod` during generate `Conf` mount in `/etc/clickhouse-server/users.d/` you can config resource quotas More details: https://clickhouse.tech/docs/en/op Your yaml code will convert to XML, see examples https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md#spe ↗
`settings`	`object`	allows configure `clickhouse-server` settings inside ... tag in generate `ConfigMap` which will mount in `/etc/clickhouse-s` More details: https://clickhouse.tech/docs/en/operations/settings code will convert to XML, see examples https://github.com/Altini operator/blob/master/docs/custom_resource_explained.md#spe ↗
`files`	`object`	allows define content of any setting file inside each `Pod` during `ConfigMap` which will mount in `/etc/clickhouse-server/co` `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-se`

属性	类型	描述
		every key in this object is the file name every value in this objec you can use `!!binary |` and base64 for binary files, see deta https://yaml.org/type/binary.html ↗ each key could contains prefi COMMON, HOST or config.d, users.d, cond.d, wrong prefixes w also will ignored More details: https://github.com/Altinity/clickhou operator/blob/master/docs/chi-examples/05-settings-05-files-nes
`clusters`	`array`	describes ClickHouse clusters layout and allows change setting shard-level and replica-level every cluster is a set of StatefulSet contains only one Pod with `clickhouse-server` all Pods will r <remote_server> part of ClickHouse configs, mounted from Cor `/etc/clickhouse-server/config.d/chop-generated-remote` Clusters will use for Distributed table engine, more details: https://clickhouse.tech/docs/en/engines/table-engines/special/di `cluster` contains zookeeper settings (could be inherited from when you can create *ReplicatedMergeTree tables

.spec.configuration.zookeeper

描述

allows configure <yandex><zookeeper>..</zookeeper></yandex> section in each `Pod` during generate `ConfigMap` which will mounted in `/etc/clickhouse-server/config.d/` `clickhouse-operator` itself doesn't manage Zookeeper, please install Zookeeper separatelly look examples on https://github.com/Altinity/clickhouse-operator/tree/master/deploy/zookeeper/ currently, zookeeper (or clickhouse-keeper replacement) used for *ReplicatedMergeTree table engines and for `distributed_ddl` More details: https://clickhouse.tech/docs/en/operations/server-configuration-parameters/settings/#server-settings_zookeeper

类型

`object`

属性	类型	描述
`nodes`	`array`	describe every available zookeeper cluster node for interaction
`session_timeout_ms`	`integer`	session timeout during connect to Zookeeper
`operation_timeout_ms`	`integer`	one operation timeout during Zookeeper transactions
`root`	`string`	optional root znode path inside zookeeper to store ClickHouse related data (replication queue or distributed DDL)
`identity`	`string`	optional access credentials string with `user:password` format used when use digest authorization in Zookeeper

.spec.configuration.zookeeper.nodes

描述

describe every available zookeeper cluster node for interaction

类型

`array`

.spec.configuration.zookeeper.nodes[]

类型

`object`

属性	类型	描述
`host`	`string`	dns name or ip address for Zookeeper node
`port`	`integer`	TCP port which used to connect to Zookeeper node

.spec.configuration.users

描述

allows configure <yandex><users>..</users></yandex> section in each `Pod` during generate `ConfigMap` which will mount in `/etc/clickhouse-server/users.d/` you can configure password hashed, authorization restrictions, database level security row filters etc. More details: https://clickhouse.tech/docs/en/operations/settings/settings-users/ Your yaml code will convert to XML, see examples https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md#specconfigurationusers

类型

`object`

.spec.configuration.profiles

描述

allows configure <yandex><profiles>..</profiles></yandex> section in each `Pod` during generate `ConfigMap` which will mount in `/etc/clickhouse-server/users.d/` you can configure any aspect of settings profile More details: https://clickhouse.tech/docs/en/operations/settings/settings-profiles/ Your yaml code will convert to XML, see examples https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md#specconfigurationprofiles

类型

`object`

.spec.configuration.quotas

描述

allows configure <yandex><quotas>..</quotas></yandex> section in each `Pod` during generate `ConfigMap` which will mount in `/etc/clickhouse-server/users.d/` you can configure any aspect of resource quotas More details: https://clickhouse.tech/docs/en/operations/quotas/ Your yaml code will convert to XML, see examples https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md#specconfigurationquotas

类型

`object`

.spec.configuration.settings

描述

allows configure `clickhouse-server` settings inside <yandex>...</yandex> tag in each `Pod` during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` More details: https://clickhouse.tech/docs/en/operations/settings/settings/ Your yaml code will convert to XML, see examples https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md#specconfigurationsettings

类型

`object`

.spec.configuration.files

描述

allows define content of any setting file inside each `Pod` during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-server/users.d/` every key in this object is the file name every value in this object is the file content you can use `!!binary |` and base64 for binary files, see details here https://yaml.org/type/binary.html each key could contains prefix like USERS, COMMON, HOST or config.d, users.d, cond.d, wrong prefixes will ignored, subfolders also will ignored More details: https://github.com/Altinity/clickhouse-operator/blob/master/docs/chi-examples/05-settings-05-files-nested.yaml

类型

`object`

.spec.configuration.clusters

描述

describes ClickHouse clusters layout and allows change settings on cluster-level, shard-level and replica-level every cluster is a set of StatefulSet, one StatefulSet contains only one Pod with `clickhouse-server` all Pods will rendered in <remote_server> part of ClickHouse configs, mounted from ConfigMap as `/etc/clickhouse-server/config.d/chop-generated-remote_servers.xml` Clusters will use for Distributed table engine, more details: https://clickhouse.tech/docs/en/engines/table-engines/special/distributed/ If `cluster` contains zookeeper settings (could be inherited from top `chi` level), when you can create *ReplicatedMergeTree tables

类型

`array`

.spec.configuration.clusters[]

类型

`object`

属性	类型	描述
`name`	`string`	cluster name, used to identify set of ClickHouse servers and wide used during generate names of related Kubernetes resources
`zookeeper`	`object`	optional, allows configure .. section in each `Pod` only in current ClickHouse cluster, during generate `ConfigMap` which will mounted in `/etc/clickhouse-`

属性	类型	描述
		`server/config.d/` override top-level `chi.spec.configuration.zookeeper` settings
`settings`	`object`	optional, allows configure `clickhouse-server` settings inside ... tag in each `Pod` only in one cluster during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` override top-level `chi.spec.configuration.settings` More details: https://clickhouse.tech/docs/en/operations/settings/settings/ ↗
`files`	`object`	optional, allows define content of any setting file inside each `Pod` on current cluster during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-server/users.d/` override top-level `chi.spec.configuration.files`
`templates`	`object`	optional, configuration of the templates names which will use for generate Kubernetes resources according to selected cluster override top-level `chi.spec.configuration.templates`
`schemaPolicy`	`object`	describes how schema is propagated within replicas and shards

属性	类型	描述
`secret`	`object`	optional, shared secret value to secure cluster communications
`layout`	`object`	describe current cluster layout, how much shards in cluster, how much replica in shard allows override settings on each shard and replica separatelly

.spec.configuration.clusters[].zookeeper

描述

optional, allows configure <yandex><zookeeper>..</zookeeper></yandex> section in each `Pod` only in current ClickHouse cluster, during generate `ConfigMap` which will mounted in `/etc/clickhouse-server/config.d/` override top-level `chi.spec.configuration.zookeeper` settings

类型

`object`

属性	类型	描述
`nodes`	`array`	describe every available zookeeper cluster node for interaction
`session_timeout_ms`	`integer`	session timeout during connect to Zookeeper
`operation_timeout_ms`	`integer`	one operation timeout during Zookeeper transactions

属性	类型	描述
`root`	`string`	optional root znode path inside zookeeper to store ClickHouse related data (replication queue or distributed DDL)
`identity`	`string`	optional access credentials string with `user:password` format used when use digest authorization in Zookeeper

.spec.configuration.clusters[].zookeeper.nodes

描述

describe every available zookeeper cluster node for interaction

类型

`array`

.spec.configuration.clusters[].zookeeper.nodes[]

类型

`object`

属性	类型	描述
`host`	`string`	dns name or ip address for Zookeeper node
`port`	`integer`	TCP port which used to connect to Zookeeper node

.spec.configuration.clusters[].settings

描述

optional, allows configure `clickhouse-server` settings inside <yandex>...</yandex> tag in each `Pod` only in one cluster during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` override top-level `chi.spec.configuration.settings` More details: https://clickhouse.tech/docs/en/operations/settings/settings/

类型

`object`

.spec.configuration.clusters[].files

描述

optional, allows define content of any setting file inside each `Pod` on current cluster during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-server/users.d/` override top-level `chi.spec.configuration.files`

类型

`object`

.spec.configuration.clusters[].templates

描述

optional, configuration of the templates names which will use for generate Kubernetes resources according to selected cluster override top-level `chi.spec.configuration.templates`

类型

`object`

属性	类型	描述
`hostTemplate`	`string`	optional, template name from chi.spec.templates.hostTemplates, which will apply to configure every `clickhouse-`

属性	类型	描述
		`server` instance during render ConfigMap resources which will mount into `Pod`
`podTemplate`	`string`	optional, template name from chi.spec.templates.podTemplates, allows customization each `Pod` resource during render and reconcile each StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`dataVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse data directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`logVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse log directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`serviceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for one `Service` resource

属性	类型	描述
		which will created by `clickhouse-operator` which cover all clusters in whole `chi` resource
`clusterServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each clickhouse cluster described in `chi.spec.configuration.clusters`
`shardServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each shard inside clickhouse cluster described in `chi.spec.configuration.clusters`
`replicaServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each replica inside each shard inside each clickhouse cluster described in `chi.spec.configuration.clusters`

属性	类型	描述
`volumeClaimTemplate`	`string`	DEPRECATED! VolumeClaimTemplate is deprecated in favor of DataVolumeClaimTemplate and LogVolumeClaimTemplate

.spec.configuration.clusters[].schemaPolicy

描述

describes how schema is propagated within replicas and shards

类型

`object`

属性	类型	描述
`replica`	`string`	how schema is propagated within a replica
`shard`	`string`	how schema is propagated between shards

.spec.configuration.clusters[].secret

描述

optional, shared secret value to secure cluster communications

类型

`object`

属性	类型	描述
`auto`	`string`	Auto-generate shared secret value to secure cluster communications
`value`	`string`	Cluster shared secret value in plain text
`valueFrom`	`object`	Cluster shared secret source

.spec.configuration.clusters[].secret.valueFrom

描述

Cluster shared secret source

类型

`object`

属性	类型	描述
`secretKeyRef`	`object`	Selects a key of a secret in the clickhouse installation namespace. Should not be used if value is not empty.

.spec.configuration.clusters[].secret.valueFrom.secretKeyRef

描述

Selects a key of a secret in the clickhouse installation namespace. Should not be used if value is not empty.

类型

`object`

必填

`name` `key`

属性	类型	描述
`name`	`string`	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names ↗
`key`	`string`	The key of the secret to select from. Must be a valid secret key.
`optional`	`boolean`	Specify whether the Secret or its key must be defined

.spec.configuration.clusters[].layout

描述

describe current cluster layout, how much shards in cluster, how much replica in shard allows override settings on each shard and replica separatelly

类型

`object`

属性	类型	描述
`type`	`string`	DEPRECATED - to be removed soon
`shardsCount`	`integer`	how much shards for current ClickHouse cluster will run in Kubernetes, each shard contains shared-nothing part

属性	类型	描述
		of data and contains set of replicas, cluster contains 1 shard by default
`replicasCount`	`integer`	how much replicas in each shards for current ClickHouse cluster will run in Kubernetes, each replica is a separate `StatefulSet` which contains only one `Pod` with `clickhouse-server` instance, every shard contains 1 replica by default
`shards`	`array`	optional, allows override top-level `chi.spec.configuration`, cluster-level `chi.spec.configuration.clusters` settings for each shard separately, use it only if you fully understand what you do
`replicas`	`array`	optional, allows override top-level `chi.spec.configuration` and cluster-level `chi.spec.configuration.clusters` configuration for each replica and each shard relates to selected replica, use it only if you fully understand what you do

.spec.configuration.clusters[].layout.shards

描述

optional, allows override top-level `chi.spec.configuration`, cluster-level `chi.spec.configuration.clusters` settings for each shard separately, use it only if you fully understand what you do

类型

`array`

.spec.configuration.clusters[].layout.shards[]

类型

`object`

属性	类型	描述
`name`	`string`	optional, by default shard name is generated, but you override it and setup custom name
`definitionType`	`string`	DEPRECATED - to be removed soon
`weight`	`integer`	optional, 1 by default, allows setup shard setting which during insert into tables with `Distributed` engine, w <remote_servers> inside ConfigMap which will mount i /etc/clickhouse-server/config.d/chop-generated-remote_servers.xml More details: https://clickhouse.tech/docs/en/engines/table-engines/special/distributed/ ↗
`internalReplication`	`string`	optional, `true` by default when `chi.spec.configuration.clusters[].layout.Repl` > 1 and 0 otherwise allows setup <internal_replication> which will use during insert into tables with `Distribut` engine for insert only in one live replica and other repli download inserted data during replication, will apply in <remote_servers> inside ConfigMap which will mount i /etc/clickhouse-server/config.d/chop-generated-remote_servers.xml More details:

属性	类型	描述
		https://clickhouse.tech/docs/en/engines/table-engines/special/distributed/ ↗
`settings`	`object`	optional, allows configure `clickhouse-server` settin ... tag in each `Pod` only in one shard during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` override top-level `chi.spec.configuration.settings` and cluster-lev `chi.spec.configuration.clusters.settings` Mor https://clickhouse.tech/docs/en/operations/settings/sett
`files`	`object`	optional, allows define content of any setting file inside `Pod` only in one shard during generate `ConfigMap` mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/click server/users.d/` override top-level `chi.spec.configuration.files` and cluster-level `chi.spec.configuration.clusters.files`
`templates`	`object`	optional, configuration of the templates names which w generate Kubernetes resources according to selected override top-level `chi.spec.configuration.templat` cluster-level `chi.spec.configuration.clusters.te`
`replicasCount`	`integer`	optional, how much replicas in selected shard for selec ClickHouse cluster will run in Kubernetes, each replica separate `StatefulSet` which contains only one `Poc` `clickhouse-server` instance, shard contains 1 repli

属性	类型	描述
		default override cluster-level `chi.spec.configuration.clusters.layout.replic`
`replicas`	`array`	optional, allows override behavior for selected replicas cluster-level `chi.spec.configuration.clusters` ar level `chi.spec.configuration.clusters.layout.sh`

.spec.configuration.clusters[].layout.shards[].settings

描述

optional, allows configure `clickhouse-server` settings inside <yandex>...</yandex> tag in each `Pod` only in one shard during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` override top-level `chi.spec.configuration.settings` and cluster-level `chi.spec.configuration.clusters.settings` More details: https://clickhouse.tech/docs/en/operations/settings/settings/

类型

`object`

.spec.configuration.clusters[].layout.shards[].files

描述

optional, allows define content of any setting file inside each `Pod` only in one shard during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-server/users.d/` override top-level `chi.spec.configuration.files` and cluster-level `chi.spec.configuration.clusters.files`

类型

`object`

.spec.configuration.clusters[].layout.shards[].templates

描述

optional, configuration of the templates names which will use for generate Kubernetes resources according to selected shard override top-level `chi.spec.configuration.templates` and cluster-level `chi.spec.configuration.clusters.templates`

类型

`object`

属性	类型	描述
`hostTemplate`	`string`	optional, template name from chi.spec.templates.hostTemplates, which will apply to configure every `clickhouse-server` instance during render ConfigMap resources which will mount into `Pod`
`podTemplate`	`string`	optional, template name from chi.spec.templates.podTemplates, allows customization each `Pod` resource during render and reconcile each StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`dataVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse data directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`

属性	类型	描述
`logVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse log directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`serviceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for one `Service` resource which will created by `clickhouse-operator` which cover all clusters in whole `chi` resource
`clusterServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each clickhouse cluster described in `chi.spec.configuration.clusters`
`shardServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each shard inside

属性	类型	描述
		clickhouse cluster described in `chi.spec.configuration.clusters`
`replicaServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each replica inside each shard inside each clickhouse cluster described in `chi.spec.configuration.clusters`
`volumeClaimTemplate`	`string`	DEPRECATED! VolumeClaimTemplate is deprecated in favor of DataVolumeClaimTemplate and LogVolumeClaimTemplate

.spec.configuration.clusters[].layout.shards[].replicas

描述

optional, allows override behavior for selected replicas from cluster-level `chi.spec.configuration.clusters` and shard-level `chi.spec.configuration.clusters.layout.shards`

类型

`array`

.spec.configuration.clusters[].layout.shards[].replicas[]

类型

`object`

属性	类型	描述
`name`	`string`	optional, by default replica name is generated, but you and setup custom name
`secure`	`boolean`	optional, setup `secure` inside `clickhouse-server` each Pod where current template will apply if specified
`tcpPort`	`integer`	optional, setup `Pod.spec.containers.ports` with na selected replica, override `chi.spec.templates.hostTemplates.spec.tcpPort` connect to `clickhouse-server` via TCP Native proto kubernetes `Service`
`httpPort`	`integer`	optional, setup `Pod.spec.containers.ports` with na selected replica, override `chi.spec.templates.hostTemplates.spec.httpPor` connect to `clickhouse-server` via HTTP protocol vi `Service`
`interserverHTTPPort`	`integer`	optional, setup `Pod.spec.containers.ports` with na `interserver` for selected replica, override `chi.spec.templates.hostTemplates.spec.interse` allows connect between replicas inside same shard du replicated data parts HTTP protocol

属性	类型	描述
`settings`	`object`	optional, allows configure `clickhouse-server` settin in `Pod` only in one replica during generate `ConfigMa` mount in `/etc/clickhouse-server/conf.d/` overric `chi.spec.configuration.settings`, cluster-level `chi.spec.configuration.clusters.settings` and `chi.spec.configuration.clusters.layout.shards` More details: https://clickhouse.tech/docs/en/operations/settings/sett
`files`	`object`	optional, allows define content of any setting file inside one replica during generate `ConfigMap` which will mo `/etc/clickhouse-server/config.d/` or `/etc/cli server/conf.d/` or `/etc/clickhouse-server/user` top-level `chi.spec.configuration.files`, cluster-le `chi.spec.configuration.clusters.files` and sha `chi.spec.configuration.clusters.layout.shards`
`templates`	`object`	optional, configuration of the templates names which w generate Kubernetes resources according to selected top-level `chi.spec.configuration.templates`, clus `chi.spec.configuration.clusters.templates` an `chi.spec.configuration.clusters.layout.shards`

.spec.configuration.clusters[].layout.shards[].replicas[].settings

描述

optional, allows configure `clickhouse-server` settings inside <yandex>...</yandex> tag in `Pod` only in one replica during generate `ConfigMap` which will mount in `/etc/clickhouse-server/conf.d/` override top-level `chi.spec.configuration.settings`, cluster-level `chi.spec.configuration.clusters.settings` and shard-level `chi.spec.configuration.clusters.layout.shards.settings` More details: https://clickhouse.tech/docs/en/operations/settings/settings/

类型

`object`

.spec.configuration.clusters[].layout.shards[].replicas[].files

描述

optional, allows define content of any setting file inside `Pod` only in one replica during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-server/users.d/` override top-level `chi.spec.configuration.files`, cluster-level `chi.spec.configuration.clusters.files` and shard-level `chi.spec.configuration.clusters.layout.shards.files`

类型

`object`

.spec.configuration.clusters[].layout.shards[].replicas[].templates

描述

optional, configuration of the templates names which will use for generate Kubernetes resources according to selected replica override top-level `chi.spec.configuration.templates`, cluster-level `chi.spec.configuration.clusters.templates` and shard-level `chi.spec.configuration.clusters.layout.shards.templates`

类型

`object`

属性	类型	描述
`hostTemplate`	`string`	optional, template name from chi.spec.templates.hostTemplates, which will apply to configure every `clickhouse-server` instance during render ConfigMap resources which will mount into `Pod`
`podTemplate`	`string`	optional, template name from chi.spec.templates.podTemplates, allows customization each `Pod` resource during render and reconcile each StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`dataVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse data directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`logVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse log directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`

属性	类型	描述
`serviceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for one `Service` resource which will created by `clickhouse-operator` which cover all clusters in whole `chi` resource
`clusterServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each clickhouse cluster described in `chi.spec.configuration.clusters`
`shardServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each shard inside clickhouse cluster described in `chi.spec.configuration.clusters`
`replicaServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each replica inside each shard inside each clickhouse cluster

属性	类型	描述
		described in `chi.spec.configuration.clusters`
`volumeClaimTemplate`	`string`	DEPRECATED! VolumeClaimTemplate is deprecated in favor of DataVolumeClaimTemplate and LogVolumeClaimTemplate

.spec.configuration.clusters[].layout.replicas

描述

optional, allows override top-level `chi.spec.configuration` and cluster-level `chi.spec.configuration.clusters` configuration for each replica and each shard relates to selected replica, use it only if you fully understand what you do

类型

`array`

.spec.configuration.clusters[].layout.replicas[]

类型

`object`

属性	类型	描述
`name`	`string`	optional, by default replica name is generated, but you can override it and setup custom name
`settings`	`object`	optional, allows configure `clickhouse-server` settings inside tag in `Pod` only in one replica during generate `ConfigMap`

属性	类型	描述
		which will mount in `/etc/clickhouse-server/conf.d/` overri top-level `chi.spec.configuration.settings`, cluster-level `chi.spec.configuration.clusters.settings` and will ignor if shard-level `chi.spec.configuration.clusters.layout.shards` present More details: https://clickhouse.tech/docs/en/operations/settings/settings/ ↗
`files`	`object`	optional, allows define content of any setting file inside each `Pod` only in one replica during generate `ConfigMap` which wi mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-server/users.d/` override top-level `chi.spec.configuration.files` and cluster-level `chi.spec.configuration.clusters.files`, will ignore if `chi.spec.configuration.clusters.layout.shards` present
`templates`	`object`	optional, configuration of the templates names which will use for generate Kubernetes resources according to selected replica override top-level `chi.spec.configuration.templates`, cluster-level `chi.spec.configuration.clusters.templates`
`shardsCount`	`integer`	optional, count of shards related to current replica, you can override each shard behavior on low-level `chi.spec.configuration.clusters.layout.replicas.sharc`

属性	类型	描述
`shards`	`array`	optional, list of shards related to current replica, will ignore if `chi.spec.configuration.clusters.layout.shards` present

.spec.configuration.clusters[].layout.replicas[].settings

描述

optional, allows configure `clickhouse-server` settings inside <yandex>...</yandex> tag in `Pod` only in one replica during generate `ConfigMap` which will mount in `/etc/clickhouse-server/conf.d/` override top-level `chi.spec.configuration.settings`, cluster-level `chi.spec.configuration.clusters.settings` and will ignore if shard-level `chi.spec.configuration.clusters.layout.shards` present More details: https://clickhouse.tech/docs/en/operations/settings/settings/

类型

`object`

.spec.configuration.clusters[].layout.replicas[].files

描述

optional, allows define content of any setting file inside each `Pod` only in one replica during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-server/users.d/` override top-level `chi.spec.configuration.files` and cluster-level `chi.spec.configuration.clusters.files`, will ignore if `chi.spec.configuration.clusters.layout.shards` presents

类型

`object`

.spec.configuration.clusters[].layout.replicas[].templates

描述

optional, configuration of the templates names which will use for generate Kubernetes resources according to selected replica override top-level `chi.spec.configuration.templates`, cluster-level `chi.spec.configuration.clusters.templates`

类型

`object`

属性	类型	描述
`hostTemplate`	`string`	optional, template name from chi.spec.templates.hostTemplates, which will apply to configure every `clickhouse-server` instance during render ConfigMap resources which will mount into `Pod`
`podTemplate`	`string`	optional, template name from chi.spec.templates.podTemplates, allows customization each `Pod` resource during render and reconcile each StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`dataVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse data directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`logVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates,

属性	类型	描述
		allows customization each `PVC` which will mount for clickhouse log directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`serviceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for one `Service` resource which will created by `clickhouse-operator` which cover all clusters in whole `chi` resource
`clusterServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each clickhouse cluster described in `chi.spec.configuration.clusters`
`shardServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each shard inside clickhouse cluster described in `chi.spec.configuration.clusters`

属性	类型	描述
`replicaServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each replica inside each shard inside each clickhouse cluster described in `chi.spec.configuration.clusters`
`volumeClaimTemplate`	`string`	DEPRECATED! VolumeClaimTemplate is deprecated in favor of DataVolumeClaimTemplate and LogVolumeClaimTemplate

.spec.configuration.clusters[].layout.replicas[].shards

描述

optional, list of shards related to current replica, will ignore if `chi.spec.configuration.clusters.layout.shards` presents

类型

`array`

.spec.configuration.clusters[].layout.replicas[].shards[]

类型

`object`

属性	类型	描述
`name`	`string`	optional, by default shard name is generated, but you c and setup custom name
`secure`	`boolean`	optional, setup `secure` inside `clickhouse-server` each Pod where current template will apply if specified
`tcpPort`	`integer`	optional, setup `Pod.spec.containers.ports` with na selected shard, override `chi.spec.templates.hostTemplates.spec.tcpPort` connect to `clickhouse-server` via TCP Native proto kubernetes `Service`
`httpPort`	`integer`	optional, setup `Pod.spec.containers.ports` with na selected shard, override `chi.spec.templates.hostTemplates.spec.httpPor` connect to `clickhouse-server` via HTTP protocol vi `Service`
`interserverHTTPPort`	`integer`	optional, setup `Pod.spec.containers.ports` with na `interserver` for selected shard, override `chi.spec.templates.hostTemplates.spec.interse` allows connect between replicas inside same shard du replicated data parts HTTP protocol
`settings`	`object`	optional, allows configure `clickhouse-server` settin in `Pod` only in one shard related to current replica du

属性	类型	描述
		`ConfigMap` which will mount in `/etc/clickhouse-server/conf.d/` override top-level `chi.spec.configuration.settings`, cluster-level `chi.spec.configuration.clusters.settings` and `chi.spec.configuration.clusters.layout.replic` More details: https://clickhouse.tech/docs/en/operations/settings/sett
`files`	`object`	optional, allows define content of any setting file inside only in one shard related to current replica during gene `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/co` `/etc/clickhouse-server/users.d/` override top-le `chi.spec.configuration.files` and cluster-level `chi.spec.configuration.clusters.files`, will ign `chi.spec.configuration.clusters.layout.shards`
`templates`	`object`	optional, configuration of the templates names which w generate Kubernetes resources according to selected top-level `chi.spec.configuration.templates`, clus `chi.spec.configuration.clusters.templates`, re `chi.spec.configuration.clusters.layout.replic`

.spec.configuration.clusters[].layout.replicas[].shards[].settings

描述

optional, allows configure `clickhouse-server` settings inside <yandex>...</yandex> tag in `Pod` only in one shard related to current replica during generate `ConfigMap` which will

mount in `/etc/clickhouse-server/conf.d/` override top-level `chi.spec.configuration.settings`, cluster-level `chi.spec.configuration.clusters.settings` and replica-level `chi.spec.configuration.clusters.layout.replicas.settings` More details: https://clickhouse.tech/docs/en/operations/settings/settings/

类型

`object`

.spec.configuration.clusters[].layout.replicas[].shards[].files

描述

optional, allows define content of any setting file inside each `Pod` only in one shard related to current replica during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-server/users.d/` override top-level `chi.spec.configuration.files` and cluster-level `chi.spec.configuration.clusters.files`, will ignore if `chi.spec.configuration.clusters.layout.shards` presents

类型

`object`

.spec.configuration.clusters[].layout.replicas[].shards[].templates

描述

optional, configuration of the templates names which will use for generate Kubernetes resources according to selected replica override top-level `chi.spec.configuration.templates`, cluster-level `chi.spec.configuration.clusters.templates`, replica-level `chi.spec.configuration.clusters.layout.replicas.templates`

类型

`object`

属性	类型	描述
`hostTemplate`	`string`	optional, template name from chi.spec.templates.hostTemplates, which will apply to configure every `clickhouse-server` instance during render ConfigMap resources which will mount into `Pod`
`podTemplate`	`string`	optional, template name from chi.spec.templates.podTemplates, allows customization each `Pod` resource during render and reconcile each StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`dataVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse data directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`logVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse log directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`

属性	类型	描述
`serviceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for one `Service` resource which will created by `clickhouse-operator` which cover all clusters in whole `chi` resource
`clusterServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each clickhouse cluster described in `chi.spec.configuration.clusters`
`shardServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each shard inside clickhouse cluster described in `chi.spec.configuration.clusters`
`replicaServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each replica inside each shard inside each clickhouse cluster

属性	类型	描述
		described in `chi.spec.configuration.clusters`
`volumeClaimTemplate`	`string`	DEPRECATED! VolumeClaimTemplate is deprecated in favor of DataVolumeClaimTemplate and LogVolumeClaimTemplate

.spec.templates

描述

allows define templates which will use for render Kubernetes resources like StatefulSet, ConfigMap, Service, PVC, by default, clickhouse-operator have own templates, but you can override it

类型

`object`

属性	类型	描述
`hostTemplates`	`array`	hostTemplate will use during apply to generate `clic`
`podTemplates`	`array`	podTemplate will use during render `Pod` inside `Sta` rendered `Pod.spec`, pod scheduling distribution and https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explaine ↗

属性	类型	描述
`volumeClaimTemplates`	`array`	allows define template for rendering `PVC` kubernete `Pod` for mount clickhouse `data`, clickhouse `logs`
`serviceTemplates`	`array`	allows define template for rendering `Service` which which scoped chi-wide, cluster-wide, shard-wide, repl

.spec.templates.hostTemplates

描述

hostTemplate will use during apply to generate `clickhose-server` config files

类型

`array`

.spec.templates.hostTemplates[]

类型

`object`

属性	类型	描述

`name`	`string`	template name, could use to link inside top-level
		`chi.spec.defaults.templates.hostTemplate`, cluster-
		`chi.spec.configuration.clusters.templates.hostTe`
		`chi.spec.configuration.clusters.layout.shards.te`
		replica-level
		`chi.spec.configuration.clusters.layout.replicas.`

属性	类型	描述
`portDistribution`	`array`	define how will distribute numeric values of named ports ir `Pod.spec.containers.ports` and clickhouse-server co
`spec`	`object`	

.spec.templates.hostTemplates[].portDistribution

描述

define how will distribute numeric values of named ports in `Pod.spec.containers.ports` and clickhouse-server configs

类型

`array`

.spec.templates.hostTemplates[].portDistribution[]

类型

`object`

属性	类型	描述
`type`	`string`	type of distribution, when `Unspecified` (default value) then all listen ports on clickhouse-server configuration in all Pods will have the same value, when `ClusterScopeIndex` then ports will increment to offset from base value depends on shard and replica index inside cluster with combination of `chi.spec.templates.podTemlates.spec.HostNetwork` it allows setup ClickHouse cluster inside Kubernetes and provide access via external network bypass Kubernetes internal network

.spec.templates.hostTemplates[].spec

类型

`object`

属性	类型	描述
`name`	`string`	by default, hostname will generate, but this allows defi `clickhuse-server`
`secure`	`boolean`	optional, setup `secure` inside `clickhouse-server` current template will apply if specified

属性	类型	描述
`tcpPort`	`integer`	optional, setup `tcp_port` inside `clickhouse-serve` current template will apply if specified, should have equ `chi.spec.templates.podTemplates.spec.containe` info: https://clickhouse.tech/docs/en/interfaces/tcp/ ↗
`httpPort`	`integer`	optional, setup `http_port` inside `clickhouse-serv` current template will apply if specified, should have equ `chi.spec.templates.podTemplates.spec.containe` info: https://clickhouse.tech/docs/en/interfaces/http/ ↗
`interserverHTTPPort`	`integer`	optional, setup `interserver_http_port` inside `cli` each Pod where current template will apply if specified `chi.spec.templates.podTemplates.spec.containe` More info: https://clickhouse.tech/docs/en/operations/s parameters/settings/#interserver-http-port ↗
`settings`	`object`	optional, allows configure `clickhouse-server` settin where this template will apply during generate `Config` `/etc/clickhouse-server/conf.d/` More details: https://clickhouse.tech/docs/en/operations/setti
`files`	`object`	optional, allows define content of any setting file inside template will apply during generate `ConfigMap` which `/etc/clickhouse-server/config.d/` or `/etc/cli` `/etc/clickhouse-server/users.d/`

属性	类型	描述
`templates`	`object`	be careful, this part of CRD allows override template in don't understand what you do

.spec.templates.hostTemplates[].spec.settings

描述

optional, allows configure `clickhouse-server` settings inside <yandex>...</yandex> tag in each `Pod` where this template will apply during generate `ConfigMap` which will mount in `/etc/clickhouse-server/conf.d/` More details: https://clickhouse.tech/docs/en/operations/settings/settings/

类型

`object`

.spec.templates.hostTemplates[].spec.files

描述

optional, allows define content of any setting file inside each `Pod` where this template will apply during generate `ConfigMap` which will mount in `/etc/clickhouse-server/config.d/` or `/etc/clickhouse-server/conf.d/` or `/etc/clickhouse-server/users.d/`

类型

`object`

.spec.templates.hostTemplates[].spec.templates

描述

be careful, this part of CRD allows override template inside template, don't use it if you don't understand what you do

类型

`object`

属性	类型	描述
`hostTemplate`	`string`	optional, template name from chi.spec.templates.hostTemplates, which will apply to configure every `clickhouse-server` instance during render ConfigMap resources which will mount into `Pod`
`podTemplate`	`string`	optional, template name from chi.spec.templates.podTemplates, allows customization each `Pod` resource during render and reconcile each StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`dataVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse data directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`
`logVolumeClaimTemplate`	`string`	optional, template name from chi.spec.templates.volumeClaimTemplates, allows customization each `PVC` which will mount for clickhouse log directory in each `Pod` during render and reconcile every StatefulSet.spec resource described in `chi.spec.configuration.clusters`

属性	类型	描述
`serviceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for one `Service` resource which will created by `clickhouse-operator` which cover all clusters in whole `chi` resource
`clusterServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each clickhouse cluster described in `chi.spec.configuration.clusters`
`shardServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each shard inside clickhouse cluster described in `chi.spec.configuration.clusters`
`replicaServiceTemplate`	`string`	optional, template name from chi.spec.templates.serviceTemplates, allows customization for each `Service` resource which will created by `clickhouse-operator` which cover each replica inside each shard inside each clickhouse cluster

属性	类型	描述
		described in `chi.spec.configuration.clusters`
`volumeClaimTemplate`	`string`	DEPRECATED! VolumeClaimTemplate is deprecated in favor of DataVolumeClaimTemplate and LogVolumeClaimTemplate

.spec.templates.podTemplates

描述

podTemplate will use during render `Pod` inside `StatefulSet.spec` and allows define rendered `Pod.spec`, pod scheduling distribution and pod zone More information: https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md#spectemplatespodtemplates

类型

`array`

.spec.templates.podTemplates[]

类型

`object`

属性	类型	描述
`name`	`string`	template name, could use to link inside top-level `chi.spec.defaults.templates.podTemplate`, cluster-le `chi.spec.configuration.clusters.templates.podTemp` `chi.spec.configuration.clusters.layout.shards.tem` level `chi.spec.configuration.clusters.layout.repli`
`generateName`	`string`	allows define format for generated `Pod` name, look to https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md ↗ for details about aviailable template variables
`zone`	`object`	allows define custom zone name and will separate ClickHo shortcut for `chi.spec.templates.podTemplates.spec.af`
`distribution`	`string`	DEPRECATED, shortcut for `chi.spec.templates.podTemplates.spec.affinity.pod`
`podDistribution`	`array`	define ClickHouse Pod distibution policy between Kubernet Namespace, CHI, another ClickHouse cluster
`spec`	`object`	allows define whole Pod.spec inside StaefulSet.spec, look https://kubernetes.io/docs/concepts/workloads/pods/#pod-t
`metadata`	`ObjectMeta ↗`	allows pass standard object's metadata from template to P https://git.k8s.io/community/contributors/devel/sig-architect

属性	类型	描述
		conventions.md#metadata ↗

.spec.templates.podTemplates[].zone

描述

allows define custom zone name and will separate ClickHouse `Pods` between nodes, shortcut for `chi.spec.templates.podTemplates.spec.affinity.podAntiAffinity`

类型

`object`

属性	类型	描述
`key`	`string`	optional, if defined, allows select kubernetes nodes by label with `name` equal `key`
`values`	`array`	optional, if defined, allows select kubernetes nodes by label with `value` in `values`

.spec.templates.podTemplates[].zone.values

描述

optional, if defined, allows select kubernetes nodes by label with `value` in `values`

类型

`array`

.spec.templates.podTemplates[].zone.values[]

类型

`string`

.spec.templates.podTemplates[].podDistribution

描述

define ClickHouse Pod distibution policy between Kubernetes Nodes inside Shard, Replica, Namespace, CHI, another ClickHouse cluster

类型

`array`

.spec.templates.podTemplates[].podDistribution[]

类型

`object`

属性	类型	描述
`type`	`string`	you can define multiple affinity policy types
`scope`	`string`	scope for apply each podDistribution
`number`	`integer`	define, how much ClickHouse Pods could be inside selected sc
`topologyKey`	`string`	use for inter-pod affinity look to `pod.spec.affinity.podAntiAffinity.preferredDuringSche` More info: https://kubernetes.io/docs/concepts/scheduling-evicti

.spec.templates.podTemplates[].spec

描述

allows define whole Pod.spec inside StaefulSet.spec, look to https://kubernetes.io/docs/concepts/workloads/pods/#pod-templates for details

类型

`object`

.spec.templates.volumeClaimTemplates

描述

allows define template for rendering `PVC` kubernetes resource, which would use inside `Pod` for mount clickhouse `data`, clickhouse `logs` or something else

类型

`array`

.spec.templates.volumeClaimTemplates[]

类型

`object`

属性	类型	描述
`name`	`string`	template name, could use to link inside top-level `chi.spec.defaults.templates.dataVolumeClaimTemplate` `chi.spec.defaults.templates.logVolumeClaimTemplate` `chi.spec.configuration.clusters.templates.dataVolum` `chi.spec.configuration.clusters.templates.logVolume` `chi.spec.configuration.clusters.layout.shards.temla` `chi.spec.configuration.clusters.layout.shards.temla` replica-level `chi.spec.configuration.clusters.layout.replicas.tem` or `chi.spec.configuration.clusters.layout.replicas.tem`

属性	类型	描述
`provisioner`	`string`	defines `PVC` provisioner - be it StatefulSet or the Operator
`reclaimPolicy`	`string`	defines behavior of `PVC` deletion. `Delete` by default, if `Re` kept when deleting StatefulSet
`metadata`	`ObjectMeta↗`	allows to pass standard object's metadata from template to P https://git.k8s.io/community/contributors/devel/sig-architecture
`spec`	`object`	allows define all aspects of `PVC` resource More info: https://kubernetes.io/docs/concepts/storage/persistent-volum

.spec.templates.volumeClaimTemplates[].spec

描述

allows define all aspects of `PVC` resource More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes/#persistentvolumeclaims

类型

`object`

.spec.templates.serviceTemplates

描述

allows define template for rendering `Service` which would get endpoint from Pods which scoped chi-wide, cluster-wide, shard-wide, replica-wide level

类型

`array`

.spec.templates.serviceTemplates[]

类型

`object`

属性	类型	描述
`name`	`string`	template name, could use to link inside chi-level `chi.spec.defaults.templates.serviceTemplate` cluster-l `chi.spec.configuration.clusters.templates.clusterSer` `chi.spec.configuration.clusters.layout.shards.temlat` replica-level `chi.spec.configuration.clusters.layout.replicas.temp` or `chi.spec.configuration.clusters.layout.shards.rep`
`generateName`	`string`	allows define format for generated `Service` name, look to https://github.com/Altinity/clickhouse-operator/blob/master/docs/custom_resource_explained.md#sp details about aviailable template variables
`metadata`	`ObjectMeta↗`	allows pass standard object's metadata from template to Servi specificly for Cloud Provider metadata which impact to behavic https://kubernetes.io/docs/concepts/services-networking/servic
`spec`	`object`	describe behavior of generated Service More info: https://kube networking/service/↗

.spec.templates.serviceTemplates[].spec

描述

describe behavior of generated Service More info: https://kubernetes.io/docs/concepts/services-networking/service/

类型

`object`

.spec.useTemplates

描述

list of `ClickHouseInstallationTemplate` (chit) resource names which will merge with current `Chi` manifest during render Kubernetes resources to create related ClickHouse clusters

类型

`array`

.spec.useTemplates[]

类型

`object`

属性	类型	描述
`name`	`string`	name of `ClickHouseInstallationTemplate` (chit) resource
`namespace`	`string`	Kubernetes namespace where need search `chit` resource, depending on `watchNamespaces` settings in `clichouse-operator`
`useType`	`string`	optional, current strategy is only merge, and current `chi` settings have more priority than merged template `chit`

API 端点

可用的 API 端点如下：

- `/apis/clickhouse.altinity.com/v1/namespaces/{namespace}/clickhouseinstallationtemplates`
  - `DELETE`: delete collection of ClickHouseInstallationTemplate
  - `GET`: list objects of kind ClickHouseInstallationTemplate
  - `POST`: create a new ClickHouseInstallationTemplate
- `/apis/clickhouse.altinity.com/v1/namespaces/{namespace}/clickhouseinstallationtemplates/{name}`
  - `DELETE`: delete the specified ClickHouseInstallationTemplate
  - `GET`: read the specified ClickHouseInstallationTemplate
  - `PATCH`: partially update the specified ClickHouseInstallationTemplate
  - `PUT`: replace the specified ClickHouseInstallationTemplate
- `/apis/clickhouse.altinity.com/v1/namespaces/{namespace}/clickhouseinstallationtemplates/{name}/status`
  - `GET`: read status of the specified ClickHouseInstallationTemplate
  - `PATCH`: partially update status of the specified ClickHouseInstallationTemplate
  - `PUT`: replace status of the specified ClickHouseInstallationTemplate

/apis/clickhouse.altinity.com/v1/namespaces/{namespace}/clickhouseinstallationtemplates

HTTP 方法

`DELETE`

描述

delete collection of ClickHouseInstallationTemplate

HTTP 响应

HTTP 状态码	响应体
200 - OK	`Status↗` schema
401 - Unauthorized	Empty

HTTP 方法

`GET`

描述

list objects of kind ClickHouseInstallationTemplate

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseInstallationTemplateList` schema
401 - Unauthorized	Empty

HTTP 方法

`POST`

描述

create a new ClickHouseInstallationTemplate

查询参数

参数	类型	描述
`dryRun`	`string`	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
`fieldValidation`	`string`	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last

参数	类型	描述
		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.

请求体参数

参数	类型	描述
`body`	`ClickHouseInstallationTemplate` schema	`application/json` formatted

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseInstallationTemplate` schema
201 - Created	`ClickHouseInstallationTemplate` schema
202 - Accepted	`ClickHouseInstallationTemplate` schema
401 - Unauthorized	Empty

/apis/clickhouse.altinity.com/v1/namespaces/{namespace}/clickhouseinstallationtemplates/{name}

HTTP 方法

`DELETE`

描述

delete the specified ClickHouseInstallationTemplate

查询参数

参数	类型	描述
`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 响应

HTTP 状态码	响应体
200 - OK	`Status↗` schema
202 - Accepted	`Status↗` schema
401 - Unauthorized	Empty

HTTP 方法

`GET`

描述

read the specified ClickHouseInstallationTemplate

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseInstallationTemplate` schema
401 - Unauthorized	Empty

HTTP 方法

`PATCH`

描述

partially update the specified ClickHouseInstallationTemplate

查询参数

参数	类型	描述
`dryRun`	`string`	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
`fieldValidation`	`string`	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseInstallationTemplate` schema
401 - Unauthorized	Empty

HTTP 方法

`PUT`

描述

replace the specified ClickHouseInstallationTemplate

查询参数

参数	类型	描述
`dryRun`	`string`	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
`fieldValidation`	`string`	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

请求体参数

参数	类型	描述
`body`	`ClickHouseInstallationTemplate` schema	`application/json` formatted

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseInstallationTemplate` schema
201 - Created	`ClickHouseInstallationTemplate` schema
401 - Unauthorized	Empty

/apis/clickhouse.altinity.com/v1/namespaces/{namespace}/clickhouseinstallationtemplates/{name}/status

HTTP 方法

`GET`

描述

read status of the specified ClickHouseInstallationTemplate

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseInstallationTemplate` schema
401 - Unauthorized	Empty

HTTP 方法

`PATCH`

描述

partially update status of the specified ClickHouseInstallationTemplate

查询参数

参数	类型	描述
`dryRun`	`string`	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun

参数	类型	描述
		directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
`fieldValidation`	`string`	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseInstallationTemplate` schema
401 - Unauthorized	Empty

HTTP 方法

`PUT`

描述

replace status of the specified ClickHouseInstallationTemplate

查询参数

参数	类型	描述
`dryRun`	`string`	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
`fieldValidation`	`string`	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

请求体参数

参数	类型	描述
`body`	`ClickHouseInstallationTemplate` schema	`application/json` formatted

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseInstallationTemplate` schema
201 - Created	`ClickHouseInstallationTemplate` schema

HTTP 状态码	响应体
401 - Unauthorized	Empty

ClickHouseOperatorConfigurations

描述

allows customize `clickhouse-operator` settings, need restart clickhouse-operator pod after adding, more details https://github.com/Altinity/clickhouse-operator/blob/master/docs/operator_configuration.md

类型

`object`

规格

属性	类型	描述
`status`	`object`	
`spec`	`object`	Allows to define settings of the clickhouse-operator. More info: https://github.com/Altinity/clickhouse-operator/blob/master/config/config.yaml Check into etc-clickhouse-operator* ConfigMaps if you need more control

.status

类型

`object`

.spec

描述

Allows to define settings of the clickhouse-operator. More info: https://github.com/Altinity/clickhouse-operator/blob/master/config/config.yaml Check into etc-clickhouse-operator* ConfigMaps if you need more control

类型

`object`

属性	类型	描述
`watch`	`object`	Parameters for watch kubernetes resources which used by clickhouse-operator deployment
`clickhouse`	`object`	Clickhouse related parameters used by clickhouse-operator
`template`	`object`	Parameters which are used if you want to generate ClickHouseInstallationTemplate custom resources from files which are stored inside clickhouse-operator deployment
`reconcile`	`object`	allow tuning reconciling process
`annotation`	`object`	defines which metadata.annotations items will include or exclude during render StatefulSet, Pod, PVC resources

属性	类型	描述
`label`	`object`	defines which metadata.labels will include or exclude during render StatefulSet, Pod, PVC resources
`statefulSet`	`object`	define StatefulSet-specific parameters
`pod`	`object`	define pod specific parameters
`logger`	`object`	allow setup clickhouse-operator logger behavior

.spec.watch

描述

Parameters for watch kubernetes resources which used by clickhouse-operator deployment

类型

`object`

属性	类型	描述
`namespaces`	`array`	List of namespaces where clickhouse-operator watches for events.

.spec.watch.namespaces

描述

List of namespaces where clickhouse-operator watches for events.

类型

`array`

.spec.watch.namespaces[]

类型

`string`

.spec.clickhouse

描述

Clickhouse related parameters used by clickhouse-operator

类型

`object`

属性	类型	描述
`configuration`	`object`	
`access`	`object`	parameters which use for connect to clickhouse from clickhouse-operator deployment

.spec.clickhouse.configuration

类型

`object`

属性	类型	描述
`file`	`object`	

属性	类型	描述
`user`	`object`	Default parameters for any user which will create
`network`	`object`	Default network parameters for any user which will create

.spec.clickhouse.configuration.file

类型

`object`

属性	类型	描述
`path`	`object`	

.spec.clickhouse.configuration.file.path

类型

`object`

属性	类型	描述
`common`	`string`	Path to the folder where ClickHouse configuration files common for all instances within a CHI are located. Default - config.d
`host`	`string`	Path to the folder where ClickHouse configuration files unique for each instance (host) within a CHI are located. Default - conf.d

属性	类型	描述
`user`	`string`	Path to the folder where ClickHouse configuration files with users settings are located. Files are common for all instances within a CHI. Default - users.d

.spec.clickhouse.configuration.user

描述

Default parameters for any user which will create

类型

`object`

属性	类型	描述
`default`	`object`	

.spec.clickhouse.configuration.user.default

类型

`object`

属性	类型	描述
`profile`	`string`	ClickHouse server configuration `<profile>... </profile>` for any
`quota`	`string`	ClickHouse server configuration `<quota>...</quota>` for any

属性	类型	描述
`networksIP`	`array`	ClickHouse server configuration `<networks><ip>...</ip></networks>` for any
`password`	`string`	ClickHouse server configuration `<password>...</password>` for any

.spec.clickhouse.configuration.user.default.networksIP

描述

ClickHouse server configuration `<networks><ip>...</ip></networks>` for any <user>

类型

`array`

.spec.clickhouse.configuration.user.default.networksIP[]

类型

`string`

.spec.clickhouse.configuration.network

描述

Default network parameters for any user which will create

类型

`object`

属性	类型	描述
`hostRegexpTemplate`	`string`	ClickHouse server configuration `<host_regexp>...</host_regexp>` for any

.spec.clickhouse.access

描述

parameters which use for connect to clickhouse from clickhouse-operator deployment

类型

`object`

属性	类型	描述
`scheme`	`string`	The scheme to user for connecting to ClickHouse. One of http or https
`username`	`string`	ClickHouse username to be used by operator to connect to ClickHouse instances, deprecated, use chCredentialsSecretName
`password`	`string`	ClickHouse password to be used by operator to connect to ClickHouse instances, deprecated, use chCredentialsSecretName
`rootCA`	`string`	Root certificate authority that clients use when verifying server certificates. Used for https connection to ClickHouse

属性	类型	描述
`secret`	`object`	
`port`	`integer`	Port to be used by operator to connect to ClickHouse instances
`timeouts`	`object`	Timeouts used to limit connection and queries from the operator to ClickHouse instances, In seconds

.spec.clickhouse.access.secret

类型

`object`

属性	类型	描述
`namespace`	`string`	Location of k8s Secret with username and password to be used by operator to connect to ClickHouse instances
`name`	`string`	Name of k8s Secret with username and password to be used by operator to connect to ClickHouse instances

.spec.clickhouse.access.timeouts

描述

Timeouts used to limit connection and queries from the operator to ClickHouse instances, In seconds

类型

`object`

属性	类型	描述
`connect`	`integer`	Connect timeout. In seconds.
`query`	`integer`	Query timeout. In seconds.

.spec.template

描述

Parameters which are used if you want to generate ClickHouseInstallationTemplate custom resources from files which are stored inside clickhouse-operator deployment

类型

`object`

属性	类型	描述
`chi`	`object`	

.spec.template.chi

类型

`object`

属性	类型	描述
`path`	`string`	Path to folder where ClickHouseInstallationTemplate .yaml manifests are located.

.spec.reconcile

描述

allow tuning reconciling process

类型

`object`

属性	类型	描述
`runtime`	`object`	runtime parameters for clickhouse-operator process which use during reconciling
`statefulSet`	`object`	Allow change default behavior for reconciling StatefulSet which generated by clickhouse-operator
`host`	`object`	allow define how to wait host include to system.cluster behavior during scale up and scale down cluster operations

.spec.reconcile.runtime

描述

runtime parameters for clickhouse-operator process which use during reconciling

类型

`object`

属性	类型	描述
`threadsNumber`	`integer`	How many goroutines will be used to reconcile in parallel, 10 by default

.spec.reconcile.statefulSet

描述

Allow change default behavior for reconciling StatefulSet which generated by clickhouse-operator

类型

`object`

属性	类型	描述
`create`	`object`	Behavior during create StatefulSet
`update`	`object`	Behavior during update StatefulSet

.spec.reconcile.statefulSet.create

描述

Behavior during create StatefulSet

类型

`object`

属性	类型	描述
`onFailure`	`string`	What to do in case created StatefulSet is not in Ready after `statefulSetUpdateTimeout` seconds Possible options: 1. abort - do nothing, just break the process and wait for admin. 2. delete - delete newly created problematic StatefulSet. 3. ignore (default) - ignore error, pretend nothing happened and move on to the next StatefulSet.

.spec.reconcile.statefulSet.update

描述

Behavior during update StatefulSet

类型

`object`

属性	类型	描述
`timeout`	`integer`	How many seconds to wait for created/updated StatefulSet to be Ready
`pollInterval`	`integer`	How many seconds to wait between checks for created/updated StatefulSet status
`onFailure`	`string`	What to do in case updated StatefulSet is not in Ready after `statefulSetUpdateTimeout` seconds Possible options:

属性	类型	描述
		1. abort - do nothing, just break the process and wait for admin. 2. rollback (default) - delete Pod and rollback StatefulSet to previous Generation. Pod would be recreated by StatefulSet based on rollback-ed configuration. 3. ignore - ignore error, pretend nothing happened and move on to the next StatefulSet.

.spec.reconcile.host

描述

allow define how to wait host include to system.cluster behavior during scale up and scale down cluster operations

类型

`object`

属性	类型	描述
`wait`	`object`	

.spec.reconcile.host.wait

类型

`object`

属性	类型	描述
`exclude`	`string`	wait when a pod will be removed from the cluster

属性	类型	描述
`include`	`string`	wait when a pod will be added to the cluster

.spec.annotation

描述

defines which metadata.annotations items will include or exclude during render StatefulSet, Pod, PVC resources

类型

`object`

属性	类型	描述
`include`	`array`	When propagating labels from the chi's `metadata.annotations` section to child objects' `metadata.annotations`, include annotations with names from the following list
`exclude`	`array`	When propagating labels from the chi's `metadata.annotations` section to child objects' `metadata.annotations`, exclude annotations with names from the following list

.spec.annotation.include

描述

When propagating labels from the chi's `metadata.annotations` section to child objects' `metadata.annotations`, include annotations with names from the following list

类型

`array`

.spec.annotation.include[]

类型

`string`

.spec.annotation.exclude

描述

When propagating labels from the chi's `metadata.annotations` section to child objects' `metadata.annotations`, exclude annotations with names from the following list

类型

`array`

.spec.annotation.exclude[]

类型

`string`

.spec.label

描述

defines which metadata.labels will include or exclude during render StatefulSet, Pod, PVC resources

类型

`object`

属性	类型	描述
`include`	`array`	When propagating labels from the chi's `metadata.labels` section to child objects' `metadata.labels`, include labels from the following list
`exclude`	`array`	When propagating labels from the chi's `metadata.labels` section to child objects' `metadata.labels`, exclude labels from the following list
`appendScope`	`string`	Whether to append *Scope* labels to StatefulSet and Pod - "LabelShardScopeIndex" - "LabelReplicaScopeIndex" - "LabelCHIScopeIndex" - "LabelCHIScopeCycleSize" - "LabelCHIScopeCycleIndex" - "LabelCHIScopeCycleOffset" - "LabelClusterScopeIndex" - "LabelClusterScopeCycleSize" - "LabelClusterScopeCycleIndex" - "LabelClusterScopeCycleOffset"

.spec.label.include

描述

When propagating labels from the chi's `metadata.labels` section to child objects' `metadata.labels`, include labels from the following list

类型

`array`

.spec.label.include[]

类型

`string`

.spec.label.exclude

描述

When propagating labels from the chi's `metadata.labels` section to child objects' `metadata.labels`, exclude labels from the following list

类型

`array`

.spec.label.exclude[]

类型

`string`

.spec.statefulSet

描述

define StatefulSet-specific parameters

类型

`object`

属性	类型	描述
`revisionHistoryLimit`	`integer`	revisionHistoryLimit is the maximum number of revisions that will be maintained in the StatefulSet's revision history.

属性	类型	描述
		Look details in `statefulset.spec.revisionHistoryLimit`

.spec.pod

描述

define pod specific parameters

类型

`object`

属性	类型	描述
`terminationGracePeriod`	`integer`	Optional duration in seconds the pod needs to terminate gracefully. Look details in `pod.spec.terminationGracePeriodSeconds`

.spec.logger

描述

allow setup clickhouse-operator logger behavior

类型

`object`

属性	类型	描述
`logtostderr`	`string`	boolean, allows logs to stderr

属性	类型	描述
`alsologtostderr`	`string`	boolean allows logs to stderr and files both
`v`	`string`	verbosity level of clickhouse-operator log, default - 1 max - 9
`stderrthreshold`	`string`	
`vmodule`	`string`	Comma-separated list of filename=N, where filename (can be a pattern) must have no .go ext, and N is a V level. Ex.: file*=2 sets the 'V' to 2 in all files with names like file*.
`log_backtrace_at`	`string`	It can be set to a file and line number with a logging line. Ex.: file.go:123 Each time when this line is being executed, a stack trace will be written to the Info log.

API 端点

可用的 API 端点如下：

- `/apis/clickhouse.altinity.com/v1/namespaces/{namespace}/clickhouseoperatorconfigurations`
  - `DELETE`: delete collection of ClickHouseOperatorConfiguration
  - `GET`: list objects of kind ClickHouseOperatorConfiguration
  - `POST`: create a new ClickHouseOperatorConfiguration

- `/apis/clickhouse.altinity.com/v1/namespaces/{namespace}/clickhouseoperatorconfigurations/{name}`
  - `DELETE`: delete the specified ClickHouseOperatorConfiguration
  - `GET`: read the specified ClickHouseOperatorConfiguration
  - `PATCH`: partially update the specified ClickHouseOperatorConfiguration
  - `PUT`: replace the specified ClickHouseOperatorConfiguration

/apis/clickhouse.altinity.com/v1/namespaces/{namespace}/clickhouseoperatorconfigurations

HTTP 方法

`DELETE`

描述

delete collection of ClickHouseOperatorConfiguration

HTTP 响应

HTTP 状态码	响应体
200 - OK	`Status↗` schema
401 - Unauthorized	Empty

HTTP 方法

`GET`

描述

list objects of kind ClickHouseOperatorConfiguration

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseOperatorConfigurationList` schema
401 - Unauthorized	Empty

HTTP 方法

`POST`

描述

create a new ClickHouseOperatorConfiguration

查询参数

参数	类型	描述
`dryRun`	`string`	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
`fieldValidation`	`string`	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

请求体参数

参数	类型	描述
`body`	`ClickHouseOperatorConfiguration` schema	`application/json` formatted

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseOperatorConfiguration` schema
201 - Created	`ClickHouseOperatorConfiguration` schema
202 - Accepted	`ClickHouseOperatorConfiguration` schema
401 - Unauthorized	Empty

/apis/clickhouse.altinity.com/v1/namespaces/{namespace}/clickhouseoperatorconfigurations/{name}

HTTP 方法

`DELETE`

描述

delete the specified ClickHouseOperatorConfiguration

查询参数

参数	类型	描述
`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 响应

HTTP 状态码	响应体
200 - OK	`Status↗` schema
202 - Accepted	`Status↗` schema

HTTP 状态码	响应体
401 - Unauthorized	Empty

HTTP 方法

`GET`

描述

read the specified ClickHouseOperatorConfiguration

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseOperatorConfiguration` schema
401 - Unauthorized	Empty

HTTP 方法

`PATCH`

描述

partially update the specified ClickHouseOperatorConfiguration

查询参数

参数	类型	描述
`dryRun`	`string`	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
`fieldValidation`	`string`	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a

参数	类型	描述
		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 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseOperatorConfiguration` schema
401 - Unauthorized	Empty

HTTP 方法

`PUT`

描述

replace the specified ClickHouseOperatorConfiguration

查询参数

参数	类型	描述
`dryRun`	`string`	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
`fieldValidation`	`string`	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently

参数	类型	描述
		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.

请求体参数

参数	类型	描述
`body`	`ClickHouseOperatorConfiguration` schema	`application/json` formatted

HTTP 响应

HTTP 状态码	响应体
200 - OK	`ClickHouseOperatorConfiguration` schema
201 - Created	`ClickHouseOperatorConfiguration` schema
401 - Unauthorized	Empty