Helm is a package manager for Kubernetes

Install it by

Then install Chocolatey using the Windows command line prompt using the following command.

@"%SystemRoot%\System32\WindowsPowerShell\v1.0\powershell.exe" -NoProfile -InputFormat None -ExecutionPolicy Bypass -Command "iex ((New-Object System.Net.WebClient).DownloadString('https://chocolatey.org/install.ps1'))" && SET "PATH=%PATH%;%ALLUSERSPROFILE%\chocolatey\bin"

choco install Kubernetes-helm

choco uninstall Kubernetes-helm

check helm hub in <https://artifacthub.io/>

nginx-ingress in search of nginx

kube-state-metrics of bitname collects data from kube api svc such as nodes pods configmaps and view CPU and memory usage

Microsoft Windows [Version 10.0.19042.1466]

(c) Microsoft Corporation. All rights reserved.

C:\Users\debbiswas>D:

D:\>cd Argo/helm

D:\Argo\helm>helm repo add bitnami https://charts.bitnami.com/bitnami

"bitnami" has been added to your repositories

D:\Argo\helm>helm repo update

Hang tight while we grab the latest from your chart repositories...

...Successfully got an update from the "bitnami" chart repository

Update Complete. ⎈Happy Helming!⎈

D:\Argo\helm>helm repo list

NAME URL

bitnami https://charts.bitnami.com/bitnami

D:\Argo\helm>kubectl create namespace metrics

Unable to connect to the server: dial tcp [::1]:8080: connectex: No connection could be made because the target machine actively refused it.

D:\Argo\helm>kubectl create namespace metrics

namespace/metrics created

D:\Argo\helm>helm install kube-state-metrics bitnami/kube-state-metrics -n metrics

W0203 18:27:20.762397 14392 warnings.go:70] policy/v1beta1 PodSecurityPolicy is deprecated in v1.21+, unavailable in v1.25+

W0203 18:27:20.931704 14392 warnings.go:70] policy/v1beta1 PodSecurityPolicy is deprecated in v1.21+, unavailable in v1.25+

NAME: kube-state-metrics

LAST DEPLOYED: Thu Feb 3 18:27:20 2022

NAMESPACE: metrics

STATUS: deployed

REVISION: 1

TEST SUITE: None

NOTES:

CHART NAME: kube-state-metrics

CHART VERSION: 2.2.4

APP VERSION: 2.3.0

\*\* Please be patient while the chart is being deployed \*\*

Watch the kube-state-metrics Deployment status using the command:

kubectl get deploy -w --namespace metrics kube-state-metrics

kube-state-metrics can be accessed via port "8080" on the following DNS name from within your cluster:

kube-state-metrics.metrics.svc.cluster.local

To access kube-state-metrics from outside the cluster execute the following commands:

echo "URL: http://127.0.0.1:9100/"

kubectl port-forward --namespace metrics svc/kube-state-metrics 9100:8080

D:\Argo\helm>helm ls -n metrics

NAME NAMESPACE REVISION UPDATED STATUS CHART APP VERSION

kube-state-metrics metrics 1 2022-02-03 18:27:20.1292827 +0530 IST deployed kube-state-metrics-2.2.4 2.3.0

D:\Argo\helm>echo check if working properly

check if working properly

D:\Argo\helm>kubectl get all -n metrics

NAME READY STATUS RESTARTS AGE

pod/kube-state-metrics-bd984486c-2mxgb 0/1 Running 0 90s

NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE

service/kube-state-metrics ClusterIP 10.98.78.133 <none> 8080/TCP 90s

NAME READY UP-TO-DATE AVAILABLE AGE

deployment.apps/kube-state-metrics 0/1 1 0 90s

NAME DESIRED CURRENT READY AGE

replicaset.apps/kube-state-metrics-bd984486c 1 1 0 90s

D:\Argo\helm>kubectl logs pod/kube-state-metrics-bd984486c-2mxgb -n metrics

I0203 12:58:25.812378 1 main.go:111] Using resources certificatesigningrequests,configmaps,cronjobs,daemonsets,deployments,endpoints,horizontalpodautoscalers,ingresses,jobs,limitranges,mutatingwebhookconfigurations,namespaces,networkpolicies,nodes,persistentvolumeclaims,persistentvolumes,poddisruptionbudgets,pods,replicasets,replicationcontrollers,resourcequotas,secrets,services,statefulsets,storageclasses,volumeattachments

I0203 12:58:25.812704 1 types.go:136] Using all namespace

I0203 12:58:25.812860 1 main.go:133] metric allow-denylisting: Excluding the following lists that were on denylist:

W0203 12:58:25.812921 1 client\_config.go:617] Neither --kubeconfig nor --master was specified. Using the inClusterConfig. This might not work.

I0203 12:58:25.821709 1 main.go:247] Testing communication with server

I0203 12:58:25.909937 1 main.go:252] Running with Kubernetes cluster version: v1.23. git version: v1.23.1. git tree state: clean. commit: 86ec240af8cbd1b60bcc4c03c20da9b98005b92e. platform: linux/amd64

I0203 12:58:25.910198 1 main.go:254] Communication with server successful

I0203 12:58:25.911203 1 main.go:210] Starting metrics server: [::]:8080

I0203 12:58:25.912022 1 main.go:66] levelinfomsgTLS is disabled.http2false

I0203 12:58:25.913288 1 metrics\_handler.go:96] Autosharding disabled

I0203 12:58:25.913750 1 main.go:199] Starting kube-state-metrics self metrics server: [::]:8081

I0203 12:58:25.917880 1 main.go:66] levelinfomsgTLS is disabled.http2false

I0203 12:58:25.930508 1 builder.go:192] Active resources: certificatesigningrequests,configmaps,cronjobs,daemonsets,deployments,endpoints,horizontalpodautoscalers,ingresses,jobs,limitranges,mutatingwebhookconfigurations,namespaces,networkpolicies,nodes,persistentvolumeclaims,persistentvolumes,poddisruptionbudgets,pods,replicasets,replicationcontrollers,resourcequotas,secrets,services,statefulsets,storageclasses,volumeattachments

W0203 12:58:25.953995 1 warnings.go:70] batch/v1beta1 CronJob is deprecated in v1.21+, unavailable in v1.25+; use batch/v1 CronJob

W0203 12:58:25.955171 1 warnings.go:70] autoscaling/v2beta2 HorizontalPodAutoscaler is deprecated in v1.23+, unavailable in v1.26+; use autoscaling/v2 HorizontalPodAutoscaler

W0203 12:58:25.995706 1 warnings.go:70] policy/v1beta1 PodDisruptionBudget is deprecated in v1.21+, unavailable in v1.25+; use policy/v1 PodDisruptionBudget

W0203 12:58:26.038116 1 warnings.go:70] autoscaling/v2beta2 HorizontalPodAutoscaler is deprecated in v1.23+, unavailable in v1.26+; use autoscaling/v2 HorizontalPodAutoscaler

W0203 12:58:26.062086 1 warnings.go:70] batch/v1beta1 CronJob is deprecated in v1.21+, unavailable in v1.25+; use batch/v1 CronJob

W0203 12:58:26.063065 1 warnings.go:70] policy/v1beta1 PodDisruptionBudget is deprecated in v1.21+, unavailable in v1.25+; use policy/v1 PodDisruptionBudget

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>echo look data that state metrics is collecting

look data that state metrics is collecting

D:\Argo\helm>

D:\Argo\helm>kubectl get svc

NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE

kubernetes ClusterIP 10.96.0.1 <none> 443/TCP 6d3h

D:\Argo\helm>kubectl get svc -n metrics

NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE

kube-state-metrics ClusterIP 10.98.78.133 <none> 8080/TCP 3m29s

D:\Argo\helm>

D:\Argo\helm>kubectl port-forward svc/kube-state-metrics 8080:8080 -n metrics

Forwarding from 127.0.0.1:8080 -> 8080

Forwarding from [::1]:8080 -> 8080

Handling connection for 8080

Handling connection for 8080

D:\Argo\helm>echo this has metrics for seeing all datas which can be sent to promethus for monitoring and healthz for succes status

this has metrics for seeing all datas which can be sent to promethus for monitoring and healthz for succes status

D:\Argo\helm>kubectl get all -n metrics

NAME READY STATUS RESTARTS AGE

pod/kube-state-metrics-bd984486c-2mxgb 1/1 Running 0 7m52s

NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE

service/kube-state-metrics ClusterIP 10.98.78.133 <none> 8080/TCP 7m52s

NAME READY UP-TO-DATE AVAILABLE AGE

deployment.apps/kube-state-metrics 1/1 1 1 7m52s

NAME DESIRED CURRENT READY AGE

replicaset.apps/kube-state-metrics-bd984486c 1 1 1 7m52s

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>echo use show

use show

D:\Argo\helm>

D:\Argo\helm>helm show --help

This command consists of multiple subcommands to display information about a chart

Usage:

helm show [command]

Aliases:

show, inspect

Available Commands:

all show all information of the chart

chart show the chart's definition

crds show the chart's CRDs

readme show the chart's README

values show the chart's values

Flags:

-h, --help help for show

Global Flags:

--debug enable verbose output

--kube-apiserver string the address and the port for the Kubernetes API server

--kube-as-group stringArray group to impersonate for the operation, this flag can be repeated to specify multiple groups.

--kube-as-user string username to impersonate for the operation

--kube-ca-file string the certificate authority file for the Kubernetes API server connection

--kube-context string name of the kubeconfig context to use

--kube-token string bearer token used for authentication

--kubeconfig string path to the kubeconfig file

-n, --namespace string namespace scope for this request

--registry-config string path to the registry config file (default "C:\\Users\\debbiswas\\AppData\\Roaming\\helm\\registry.json")

--repository-cache string path to the file containing cached repository indexes (default "C:\\Users\\DEBBIS~1\\AppData\\Local\\Temp\\helm\\repository")

--repository-config string path to the file containing repository names and URLs (default "C:\\Users\\debbiswas\\AppData\\Roaming\\helm\\repositories.yaml")

Use "helm show [command] --help" for more information about a command.

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>helm show chart bitnami/kube-state-metrics

annotations:

category: Analytics

apiVersion: v2

appVersion: 2.3.0

dependencies:

- name: common

repository: https://charts.bitnami.com/bitnami

tags:

- bitnami-common

version: 1.x.x

description: kube-state-metrics is a simple service that listens to the Kubernetes

API server and generates metrics about the state of the objects.

home: https://github.com/bitnami/charts/tree/master/bitnami/kube-state-metrics

icon: https://bitnami.com/assets/stacks/kube-state-metrics/img/kube-state-metrics-stack-220x234.png

keywords:

- prometheus

- kube-state-metrics

- monitoring

maintainers:

- email: containers@bitnami.com

name: Bitnami

name: kube-state-metrics

sources:

- https://github.com/bitnami/bitnami-docker-kube-state-metrics

- https://github.com/kubernetes/kube-state-metrics

version: 2.2.4

D:\Argo\helm>echo these are also present in helm hub but not the values file so now show the values

these are also present in helm hub but not the values file so now show the values

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>helm show values bitnami/kube-state-metrics

## @section Global parameters

## Global Docker image parameters

## Please, note that this will override the image parameters, including dependencies, configured to use the global value

## Current available global Docker image parameters: imageRegistry, imagePullSecrets and storageClass

##

## @param global.imageRegistry Global Docker image registry

## @param global.imagePullSecrets Global Docker registry secret names as an array

## @param global.storageClass Global StorageClass for Persistent Volume(s)

##

global:

imageRegistry: ""

## E.g.

## imagePullSecrets:

## - myRegistryKeySecretName

##

imagePullSecrets: []

storageClass: ""

## @section Common parameters

##

## @param nameOverride String to partially override `kube-state-metrics.name` template with a string (will prepend the release name)

##

nameOverride: ""

## @param fullnameOverride String to fully override `kube-state-metrics.fullname` template with a string

##

fullnameOverride: ""

## @param commonLabels Add labels to all the deployed resources

##

commonLabels: {}

## @param commonAnnotations Add annotations to all the deployed resources

##

commonAnnotations: {}

## @param extraDeploy Array of extra objects to deploy with the release

##

extraDeploy: []

## @section kube-state-metrics parameters

##

## @param hostAliases Add deployment host aliases

## https://kubernetes.io/docs/concepts/services-networking/add-entries-to-pod-etc-hosts-with-host-aliases/

##

hostAliases: []

## Role Based Access

## ref: https://kubernetes.io/docs/admin/authorization/rbac/

##

rbac:

## @param rbac.create Whether to create & use RBAC resources or not

##

create: true

## @param rbac.apiVersion Version of the RBAC API

##

apiVersion: v1beta1

## @param rbac.pspEnabled Whether to create a PodSecurityPolicy and bound it with RBAC. WARNING: PodSecurityPolicy is deprecated in Kubernetes v1.21 or later, unavailable in v1.25 or later

##

pspEnabled: true

## Service account for kube-state-metrics to use.

## ref: https://kubernetes.io/docs/tasks/configure-pod-container/configure-service-account/

##

serviceAccount:

## @param serviceAccount.create Specify whether to create a ServiceAccount for kube-state-metrics

##

create: true

## @param serviceAccount.name The name of the ServiceAccount to create

## If not set and create is true, a name is generated using the kube-state-metrics.fullname template

##

name: ""

## Bitnami kube-state-metrics image version

## ref: https://hub.docker.com/r/bitnami/kube-state-metrics/tags/

## @param image.registry kube-state-metrics image registry

## @param image.repository kube-state-metrics image repository

## @param image.tag kube-state-metrics Image tag (immutable tags are recommended)

## @param image.pullPolicy kube-state-metrics image pull policy

## @param image.pullSecrets Specify docker-registry secret names as an array

##

image:

registry: docker.io

repository: bitnami/kube-state-metrics

tag: 2.3.0-debian-10-r31

## Specify a imagePullPolicy

## Defaults to 'Always' if image tag is 'latest', else set to 'IfNotPresent'

## ref: https://kubernetes.io/docs/user-guide/images/#pre-pulling-images

##

pullPolicy: IfNotPresent

## Optionally specify an array of imagePullSecrets.

## Secrets must be manually created in the namespace.

## ref: https://kubernetes.io/docs/tasks/configure-pod-container/pull-image-private-registry/

## Example:

## pullSecrets:

## - myRegistryKeySecretName

##

pullSecrets: []

## @param extraArgs Additional command line arguments to pass to kube-state-metrics

##

extraArgs: {}

## @param namespaces Comma-separated list of namespaces to be enabled. Defaults to all namespaces. Evaluated as a template.

##

namespaces: ""

## kube-state-metrics resources to be enabled

## @param kubeResources.certificatesigningrequests Enable the `certificatesigningrequests` resource

## @param kubeResources.configmaps Enable the `configmaps` resource

## @param kubeResources.cronjobs Enable the `cronjobs` resource

## @param kubeResources.daemonsets Enable the `daemonsets` resource

## @param kubeResources.deployments Enable the `deployments` resource

## @param kubeResources.endpoints Enable the `endpoints` resource

## @param kubeResources.horizontalpodautoscalers Enable the `horizontalpodautoscalers` resource

## @param kubeResources.ingresses Enable the `ingresses` resource

## @param kubeResources.jobs Enable the `jobs` resource

## @param kubeResources.limitranges Enable the `limitranges` resource

## @param kubeResources.mutatingwebhookconfigurations Enable the `mutatingwebhookconfigurations` resource

## @param kubeResources.namespaces Enable the `namespaces` resource

## @param kubeResources.networkpolicies Enable the `networkpolicies` resource

## @param kubeResources.nodes Enable the `nodes` resource

## @param kubeResources.persistentvolumeclaims Enable the `persistentvolumeclaims` resource

## @param kubeResources.persistentvolumes Enable the `persistentvolumes` resource

## @param kubeResources.poddisruptionbudgets Enable the `poddisruptionbudgets` resource

## @param kubeResources.pods Enable the `pods` resource

## @param kubeResources.replicasets Enable the `replicasets` resource

## @param kubeResources.replicationcontrollers Enable the `replicationcontrollers` resource

## @param kubeResources.resourcequotas Enable the `resourcequotas` resource

## @param kubeResources.secrets Enable the `secrets` resource

## @param kubeResources.services Enable the `services` resource

## @param kubeResources.statefulsets Enable the `statefulsets` resource

## @param kubeResources.storageclasses Enable the `storageclasses` resource

## @param kubeResources.verticalpodautoscalers Enable the `verticalpodautoscalers` resource

## @param kubeResources.validatingwebhookconfigurations Enable the `validatingwebhookconfigurations` resource

## @param kubeResources.volumeattachments Enable the `volumeattachments` resource

##

kubeResources:

certificatesigningrequests: true

configmaps: true

cronjobs: true

daemonsets: true

deployments: true

endpoints: true

horizontalpodautoscalers: true

ingresses: true

jobs: true

limitranges: true

mutatingwebhookconfigurations: true

namespaces: true

networkpolicies: true

nodes: true

persistentvolumeclaims: true

persistentvolumes: true

poddisruptionbudgets: true

pods: true

replicasets: true

replicationcontrollers: true

resourcequotas: true

secrets: true

services: true

statefulsets: true

storageclasses: true

verticalpodautoscalers: false

validatingwebhookconfigurations: false

volumeattachments: true

## @param securityContext.enabled Enable security context

## @param securityContext.fsGroup Group ID for the container filesystem

## @param securityContext.runAsUser User ID for the container

##

securityContext:

enabled: true

runAsUser: 1001

fsGroup: 1001

## kube-state-metrics Service

##

service:

## @param service.type Kubernetes service type

##

type: ClusterIP

## @param service.port kube-state-metrics service port

##

port: 8080

## @param service.clusterIP Specific cluster IP when service type is cluster IP. Use `None` for headless service

## e.g:

## clusterIP: None

##

clusterIP: ""

## @param service.nodePort Specify the nodePort value for the LoadBalancer and NodePort service types.

## ref: https://kubernetes.io/docs/concepts/services-networking/service/#type-nodeport

## e.g:

## nodePort: 30080

##

nodePort: ""

## @param service.loadBalancerIP `loadBalancerIP` if service type is `LoadBalancer`

## ref: https://kubernetes.io/docs/concepts/services-networking/service/#internal-load-balancer

##

loadBalancerIP: ""

## @param service.loadBalancerSourceRanges Address that are allowed when svc is `LoadBalancer`

## https://kubernetes.io/docs/tasks/access-application-cluster/configure-cloud-provider-firewall/#restrict-access-for-loadbalancer-service

## e.g:

## loadBalancerSourceRanges:

## - 10.10.10.0/24

##

loadBalancerSourceRanges: []

## @param service.annotations Additional annotations for kube-state-metrics service

##

annotations: {}

## @param service.labels Additional labels for kube-state-metrics service

##

labels: {}

## @param hostNetwork Enable hostNetwork mode

##

hostNetwork: false

## @param priorityClassName Priority class assigned to the Pods

##

priorityClassName: ""

## Resource requests and limits

## ref: https://kubernetes.io/docs/user-guide/compute-resources/

## choice for the user. This also increases chances charts run on environments with little

## resources, such as Minikube. If you do want to specify resources, uncomment the following

## lines, adjust them as necessary, and remove the curly braces after 'resources:'.

## @param resources.limits The resources limits for the container

## @param resources.requests The requested resources for the container

##

resources:

## Example:

## limits:

## cpu: 100m

## memory: 128Mi

##

limits: {}

## Examples:

## requests:

## cpu: 100m

## memory: 128Mi

##

requests: {}

## @param replicaCount Desired number of controller pods

##

replicaCount: 1

## @param podLabels Pod labels

## ref: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/

##

podLabels: {}

## @param podAnnotations Pod annotations

## ref: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations/

##

podAnnotations: {}

## @param updateStrategy Allows setting of `RollingUpdate` strategy

## ref: https://kubernetes.io/docs/concepts/workloads/controllers/statefulset/#update-strategies

##

updateStrategy: {}

## @param minReadySeconds How many seconds a pod needs to be ready before killing the next, during update

##

minReadySeconds: 0

## @param podAffinityPreset Pod affinity preset. Ignored if `affinity` is set. Allowed values: `soft` or `hard`

## ref: https://kubernetes.io/docs/concepts/scheduling-eviction/assign-pod-node/#inter-pod-affinity-and-anti-affinity

##

podAffinityPreset: ""

## @param podAntiAffinityPreset Pod anti-affinity preset. Ignored if `affinity` is set. Allowed values: `soft` or `hard`

## ref: https://kubernetes.io/docs/concepts/scheduling-eviction/assign-pod-node/#inter-pod-affinity-and-anti-affinity

##

podAntiAffinityPreset: soft

## Node affinity preset

## ref: https://kubernetes.io/docs/concepts/scheduling-eviction/assign-pod-node/#node-affinity

##

nodeAffinityPreset:

## @param nodeAffinityPreset.type Node affinity preset type. Ignored if `affinity` is set. Allowed values: `soft` or `hard`

##

type: ""

## @param nodeAffinityPreset.key Node label key to match. Ignored if `affinity` is set.

## E.g.

## key: "kubernetes.io/e2e-az-name"

##

key: ""

## @param nodeAffinityPreset.values Node label values to match. Ignored if `affinity` is set.

## E.g.

## values:

## - e2e-az1

## - e2e-az2

##

values: []

## @param affinity Affinity for pod assignment

## ref: https://kubernetes.io/docs/concepts/configuration/assign-pod-node/#affinity-and-anti-affinity

## Note: podAffinityPreset, podAntiAffinityPreset, and nodeAffinityPreset will be ignored when it's set

##

affinity: {}

## @param nodeSelector Node labels for pod assignment

## ref: https://kubernetes.io/docs/user-guide/node-selection/

##

nodeSelector: {}

## @param tolerations Tolerations for pod assignment

## ref: https://kubernetes.io/docs/concepts/configuration/taint-and-toleration/

##

tolerations: []

## Configure extra options for liveness probe

## ref: https://kubernetes.io/docs/tasks/configure-pod-container/configure-liveness-readiness-probes/#configure-probes

## @param livenessProbe.enabled Turn on and off liveness probe

## @param livenessProbe.initialDelaySeconds Delay before liveness probe is initiated

## @param livenessProbe.periodSeconds How often to perform the probe

## @param livenessProbe.timeoutSeconds When the probe times out

## @param livenessProbe.failureThreshold Minimum consecutive failures for the probe

## @param livenessProbe.successThreshold Minimum consecutive successes for the probe

##

livenessProbe:

enabled: true

initialDelaySeconds: 120

periodSeconds: 10

timeoutSeconds: 5

failureThreshold: 6

successThreshold: 1

## Configure extra options for readiness probe

## ref: https://kubernetes.io/docs/tasks/configure-pod-container/configure-liveness-readiness-probes/#configure-probes

## @param readinessProbe.enabled Turn on and off readiness probe

## @param readinessProbe.initialDelaySeconds Delay before readiness probe is initiated

## @param readinessProbe.periodSeconds How often to perform the probe

## @param readinessProbe.timeoutSeconds When the probe times out

## @param readinessProbe.failureThreshold Minimum consecutive failures for the probe

## @param readinessProbe.successThreshold Minimum consecutive successes for the probe

##

readinessProbe:

enabled: true

initialDelaySeconds: 30

periodSeconds: 10

timeoutSeconds: 5

failureThreshold: 6

successThreshold: 1

## ServiceMonitor configuration

##

serviceMonitor:

## @param serviceMonitor.enabled Creates a ServiceMonitor to monitor kube-state-metrics

##

enabled: false

## @param serviceMonitor.namespace Namespace in which Prometheus is running

## e.g:

## namespace: monitoring

##

namespace: ""

## @param serviceMonitor.jobLabel The name of the label on the target service to use as the job name in prometheus.

##

jobLabel: ""

## @param serviceMonitor.interval Scrape interval (use by default, falling back to Prometheus' default)

## ref: https://github.com/coreos/prometheus-operator/blob/master/Documentation/api.md#endpoint

## e.g:

## interval: 10s

##

interval: ""

## @param serviceMonitor.scrapeTimeout Timeout after which the scrape is ended

## ref: https://github.com/coreos/prometheus-operator/blob/master/Documentation/api.md#endpoint

## e.g:

## scrapeTimeout: 10s

##

scrapeTimeout: ""

## @param serviceMonitor.selector ServiceMonitor selector labels

## ref: https://github.com/bitnami/charts/tree/master/bitnami/prometheus-operator#prometheus-configuration

## e.g:

## selector:

## prometheus: my-prometheus

##

selector: {}

## @param serviceMonitor.honorLabels Honor metrics labels

## ref: https://github.com/coreos/prometheus-operator/blob/master/Documentation/api.md#endpoint

## e.g:

## honorLabels: false

##

honorLabels: false

## @param serviceMonitor.relabelings ServiceMonitor relabelings

## ref: https://github.com/coreos/prometheus-operator/blob/master/Documentation/api.md#relabelconfig

##

relabelings: []

## @param serviceMonitor.metricRelabelings ServiceMonitor metricRelabelings

## ref: https://github.com/coreos/prometheus-operator/blob/master/Documentation/api.md#relabelconfig

##

metricRelabelings: []

D:\Argo\helm>echo open this in a file as it is hard to read here

open this in a file as it is hard to read here

D:\Argo\helm>

D:\Argo\helm>helm show values bitnami/kube-state-metrics > values.yaml

D:\Argo\helm>code values.yaml

D:\Argo\helm>echo this opens file in vscode

this opens file in vscode

D:\Argo\helm>

D:\Argo\helm>echo update latest version

update latest version

D:\Argo\helm>

D:\Argo\helm>helm ls -n metrics

NAME NAMESPACE REVISION UPDATED STATUS CHART APP VERSION

kube-state-metrics metrics 1 2022-02-03 18:27:20.1292827 +0530 IST deployed kube-state-metrics-2.2.4 2.3.0

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>helm upgrade kube-state-metrics bitnami/kube-state-metrics --version 0.4.0 -n metrics

W0203 18:45:36.222655 14712 warnings.go:70] policy/v1beta1 PodSecurityPolicy is deprecated in v1.21+, unavailable in v1.25+

W0203 18:45:36.239940 14712 warnings.go:70] policy/v1beta1 PodSecurityPolicy is deprecated in v1.21+, unavailable in v1.25+

W0203 18:45:36.367826 14712 warnings.go:70] policy/v1beta1 PodSecurityPolicy is deprecated in v1.21+, unavailable in v1.25+

Release "kube-state-metrics" has been upgraded. Happy Helming!

NAME: kube-state-metrics

LAST DEPLOYED: Thu Feb 3 18:45:35 2022

NAMESPACE: metrics

STATUS: deployed

REVISION: 2

TEST SUITE: None

NOTES:

\*\* Please be patient while the chart is being deployed \*\*

Watch the kube-state-metrics Deployment status using the command:

kubectl get deploy -w --namespace metrics -l app.kubernetes.io/name=kube-state-metrics,app.kubernetes.io/instance=kube-state-metrics

kube-state-metrics can be accessed via port "8080" on the following DNS name from within your cluster:

kube-state-metrics.metrics.svc.cluster.local

To access kube-state-metrics from outside the cluster execute the following commands:

echo "URL: http://127.0.0.1:9100/"

kubectl port-forward --namespace metrics svc/kube-state-metrics 9100:8080

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>kubectl get all -n metrics

NAME READY STATUS RESTARTS AGE

pod/kube-state-metrics-64c995c979-96d6g 0/1 ContainerCreating 0 30s

pod/kube-state-metrics-bd984486c-2mxgb 1/1 Running 0 18m

NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE

service/kube-state-metrics ClusterIP 10.98.78.133 <none> 8080/TCP 18m

NAME READY UP-TO-DATE AVAILABLE AGE

deployment.apps/kube-state-metrics 1/1 1 1 18m

NAME DESIRED CURRENT READY AGE

replicaset.apps/kube-state-metrics-64c995c979 1 1 0 30s

replicaset.apps/kube-state-metrics-bd984486c 1 1 1 18m

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>kubectl create namespace challange

namespace/challange created

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>helm install challenge-metrics-server bitnami/metrics-server --set apiService.create=true -n challange

NAME: challenge-metrics-server

LAST DEPLOYED: Thu Feb 3 18:50:06 2022

NAMESPACE: challange

STATUS: deployed

REVISION: 1

TEST SUITE: None

NOTES:

CHART NAME: metrics-server

CHART VERSION: 5.11.0

APP VERSION: 0.6.0

\*\* Please be patient while the chart is being deployed \*\*

The metric server has been deployed.

In a few minutes you should be able to list metrics using the following

command:

kubectl get --raw "/apis/metrics.k8s.io/v1beta1/nodes"

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>kubectl get all -n challange

NAME READY STATUS RESTARTS AGE

pod/challenge-metrics-server-5675568cb9-5w7nk 0/1 ContainerCreating 0 24s

NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE

service/challenge-metrics-server ClusterIP 10.106.92.25 <none> 443/TCP 24s

NAME READY UP-TO-DATE AVAILABLE AGE

deployment.apps/challenge-metrics-server 0/1 1 0 24s

NAME DESIRED CURRENT READY AGE

replicaset.apps/challenge-metrics-server-5675568cb9 1 1 0 24s

D:\Argo\helm>helm delete challenge-metrics-server

Error: uninstall: Release not loaded: challenge-metrics-server: release: not found

D:\Argo\helm>helm delete challenge-metrics-server -n challange

release "challenge-metrics-server" uninstalled

D:\Argo\helm>

D:\Argo\helm>kubectl get all -n challange

No resources found in challange namespace.

D:\Argo\helm>kubectl delete namespace challange

namespace "challange" deleted

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>mkdir helm-course

D:\Argo\helm>cd helm-course

D:\Argo\helm\helm-course>h

'h' is not recognized as an internal or external command,

operable program or batch file.

D:\Argo\helm\helm-course>

D:\Argo\helm\helm-course>

D:\Argo\helm\helm-course>helm create first-chart

Creating first-chart

D:\Argo\helm\helm-course>

D:\Argo\helm\helm-course>echo see the boiler plate files

see the boiler plate files

D:\Argo\helm\helm-course>ls first-chart/

'ls' is not recognized as an internal or external command,

operable program or batch file.

D:\Argo\helm\helm-course>code fisrt-chart/

D:\Argo\helm\helm-course>code first-chart/

D:\Argo\helm\helm-course>

D:\Argo\helm\helm-course>cd ..

D:\Argo\helm>mkdir configmap-chart

D:\Argo\helm>cd configmap-chart

D:\Argo\helm\configmap-chart>cd ..

D:\Argo\helm>rm configmap-chart

'rm' is not recognized as an internal or external command,

operable program or batch file.

D:\Argo\helm>echo deleting configmap folder

deleting configmap folder

D:\Argo\helm>

D:\Argo\helm>

D:\Argo\helm>helm create configmap-chart

Creating configmap-chart

D:\Argo\helm>code configmap-chart

D:\Argo\helm>echo create a configmap in this

create a configmap in this

D:\Argo\helm>

D:\Argo\helm>helm install configmap-chart .

Error: INSTALLATION FAILED: Chart.yaml file is missing

D:\Argo\helm>cd configmap-chart

D:\Argo\helm\configmap-chart>cd configmap-chart

The system cannot find the path specified.

D:\Argo\helm\configmap-chart>helm install configmap-chart .

NAME: configmap-chart

LAST DEPLOYED: Thu Feb 3 19:11:46 2022

NAMESPACE: default

STATUS: deployed

REVISION: 1

TEST SUITE: None

D:\Argo\helm\configmap-chart>kubectl get configmap

NAME DATA AGE

configmap-chart-configmap 1 24s

kube-root-ca.crt 1 6d4h

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>kubectl describe configmap configmap-chart-configmap

Name: configmap-chart-configmap

Namespace: default

Labels: app.kubernetes.io/managed-by=Helm

Annotations: meta.helm.sh/release-name: configmap-chart

meta.helm.sh/release-namespace: default

Data

====

port:

----

8080

BinaryData

====

Events: <none>

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>helm template configmap-chart .

---

# Source: configmap-chart/templates/configmap.yaml

apiVersion: v1

kind: ConfigMap

metadata:

name: configmap-chart-configmap

data:

port: "8080"

allowTesting: "true"

D:\Argo\helm\configmap-chart>kubectl describe configmap configmap-chart-configmap

Name: configmap-chart-configmap

Namespace: default

Labels: app.kubernetes.io/managed-by=Helm

Annotations: meta.helm.sh/release-name: configmap-chart

meta.helm.sh/release-namespace: default

Data

====

port:

----

8080

BinaryData

====

Events: <none>

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>helm upgrade configmap-chart .

Release "configmap-chart" has been upgraded. Happy Helming!

NAME: configmap-chart

LAST DEPLOYED: Thu Feb 3 19:15:56 2022

NAMESPACE: default

STATUS: deployed

REVISION: 2

TEST SUITE: None

D:\Argo\helm\configmap-chart>kubectl describe configmap configmap-chart-configmap

Name: configmap-chart-configmap

Namespace: default

Labels: app.kubernetes.io/managed-by=Helm

Annotations: meta.helm.sh/release-name: configmap-chart

meta.helm.sh/release-namespace: default

Data

====

allowTesting:

----

true

port:

----

8080

BinaryData

====

Events: <none>

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>echo -n 'admin' | base64

'base64' is not recognized as an internal or external command,

operable program or batch file.

D:\Argo\helm\configmap-chart>helm template configmap-chart .

---

# Source: configmap-chart/templates/secret.yaml

apiVersion: v1

kind: Secret

metadata:

name: configmap-secret

type: Opaque

data:

username: YWRtaW4=

password: cGFzc3dvcmQ=

# convert admin and password in base64 using online linux ide

#echo -n 'admin' | base64

---

# Source: configmap-chart/templates/configmap.yaml

apiVersion: v1

kind: ConfigMap

metadata:

name: configmap-chart-configmap

data:

port: "8080"

allowTesting: "true"

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>helm upgrade configmap-chart .

Release "configmap-chart" has been upgraded. Happy Helming!

NAME: configmap-chart

LAST DEPLOYED: Thu Feb 3 19:29:09 2022

NAMESPACE: default

STATUS: deployed

REVISION: 3

TEST SUITE: None

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>kubectl describe secret configmap-chart-configmap

Error from server (NotFound): secrets "configmap-chart-configmap" not found

D:\Argo\helm\configmap-chart>kubectl get all

NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE

service/kubernetes ClusterIP 10.96.0.1 <none> 443/TCP 6d4h

D:\Argo\helm\configmap-chart>kubectl describe secret configmap-secret

Name: configmap-secret

Namespace: default

Labels: app.kubernetes.io/managed-by=Helm

Annotations: meta.helm.sh/release-name: configmap-chart

meta.helm.sh/release-namespace: default

Type: Opaque

Data

====

password: 8 bytes

username: 5 bytes

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>echo rollback to previous version

rollback to previous version

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>helm history configmap-chart

REVISION UPDATED STATUS CHART APP VERSION DESCRIPTION

1 Thu Feb 3 19:11:46 2022 superseded configmap-chart-0.1.0 1.16.0 Install complete

2 Thu Feb 3 19:15:56 2022 superseded configmap-chart-0.1.0 1.16.0 Upgrade complete

3 Thu Feb 3 19:29:09 2022 deployed configmap-chart-0.1.0 1.16.0 Upgrade complete

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>helm rollback configmap-chart

Rollback was a success! Happy Helming!

D:\Argo\helm\configmap-chart>helm history configmap-chart

REVISION UPDATED STATUS CHART APP VERSION DESCRIPTION

1 Thu Feb 3 19:11:46 2022 superseded configmap-chart-0.1.0 1.16.0 Install complete

2 Thu Feb 3 19:15:56 2022 superseded configmap-chart-0.1.0 1.16.0 Upgrade complete

3 Thu Feb 3 19:29:09 2022 superseded configmap-chart-0.1.0 1.16.0 Upgrade complete

4 Thu Feb 3 19:32:43 2022 deployed configmap-chart-0.1.0 1.16.0 Rollback to 2

D:\Argo\helm\configmap-chart>helm rollback configmap-chart 4

Rollback was a success! Happy Helming!

D:\Argo\helm\configmap-chart>helm history configmap-chart

REVISION UPDATED STATUS CHART APP VERSION DESCRIPTION

1 Thu Feb 3 19:11:46 2022 superseded configmap-chart-0.1.0 1.16.0 Install complete

2 Thu Feb 3 19:15:56 2022 superseded configmap-chart-0.1.0 1.16.0 Upgrade complete

3 Thu Feb 3 19:29:09 2022 superseded configmap-chart-0.1.0 1.16.0 Upgrade complete

4 Thu Feb 3 19:32:43 2022 superseded configmap-chart-0.1.0 1.16.0 Rollback to 2

5 Thu Feb 3 19:34:22 2022 deployed configmap-chart-0.1.0 1.16.0 Rollback to 4

D:\Argo\helm\configmap-chart>kubectl get cm

NAME DATA AGE

configmap-chart-configmap 2 30m

kube-root-ca.crt 1 6d4h

D:\Argo\helm\configmap-chart>helm upgrade configmap-chart .

Release "configmap-chart" has been upgraded. Happy Helming!

NAME: configmap-chart

LAST DEPLOYED: Thu Feb 3 19:42:23 2022

NAMESPACE: default

STATUS: deployed

REVISION: 6

TEST SUITE: None

D:\Argo\helm\configmap-chart>kubectl get cm

NAME DATA AGE

configmap-chart-configmap-0.1.0 2 11s

kube-root-ca.crt 1 6d4h

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>echo see the version added

see the version added

D:\Argo\helm\configmap-chart>helm template configmap-chart .

---

# Source: configmap-chart/templates/secret.yaml

apiVersion: v1

kind: Secret

metadata:

name: configmap-secret

type: Opaque

data:

username: YWRtaW4=

password: cGFzc3dvcmQ=

# convert admin and password in base64 using online linux ide

#echo -n 'admin' | base64

---

# Source: configmap-chart/templates/configmap.yaml

apiVersion: v1

kind: ConfigMap

metadata:

name: configmap-chart-configmap-0.1.0

data:

port: "8080"

allowTesting: "true"

D:\Argo\helm\configmap-chart>echo this version is added dynamically

this version is added dynamically

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>helm template configmap-chart .

Error: template: configmap-chart/templates/configmap.yaml:7:7: executing "configmap-chart/templates/configmap.yaml" at <eq>: wrong number of args for eq: want at least 1 got 0

Use --debug flag to render out invalid YAML

D:\Argo\helm\configmap-chart>helm template configmap-chart .

---

# Source: configmap-chart/templates/secret.yaml

apiVersion: v1

kind: Secret

metadata:

name: configmap-secret

type: Opaque

data:

username: YWRtaW4=

password: cGFzc3dvcmQ=

# convert admin and password in base64 using online linux ide

#echo -n 'admin' | base64

---

# Source: configmap-chart/templates/configmap.yaml

apiVersion: v1

kind: ConfigMap

metadata:

name: configmap-chart-configmap-0.1.0

data:

port: "8080"

allowTesting: "false"

D:\Argo\helm\configmap-chart>

D:\Argo\helm\configmap-chart>