Kubernetes 5 notes

Helm charts

Promethues

Grafana

EFK Stack

To install in Amazon Linux VM -->

sudo yum install git

sudo yum install java

sudo yum install maven

Ubuntu Linux VM

sudo apt install git

sudo apt install maven

HELM

HELM is a package manager, which is used to install required softwares in Kubernetes cluster. With metrics-server, it is very complex and time-consuming. Similar to yum/apt package manager in Linux distribution, Helm allows us to install applications on Kubernetes cluster. Helm uses charts in order to achieve this. Charts refer to collection of configuration files (manifest yml)

Chart repository

K8s API server

Helm client

Kubernetes cluster

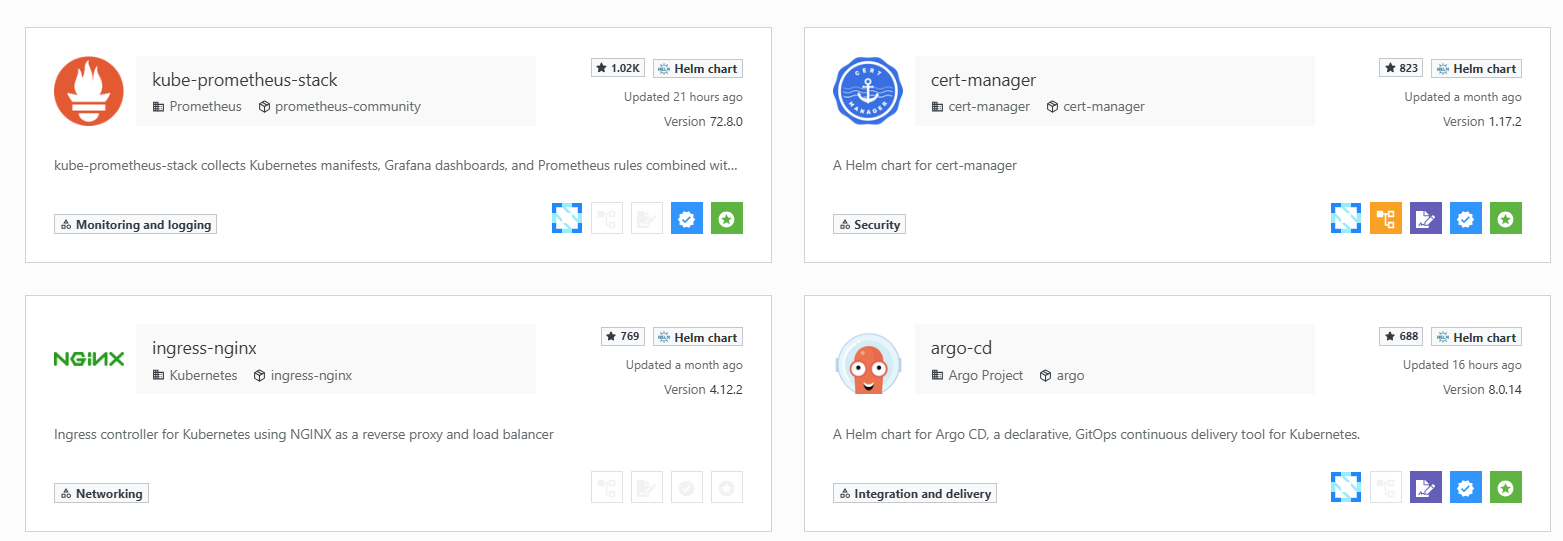
Helm talks to Kubernetes API server in order to install packages in the cluster

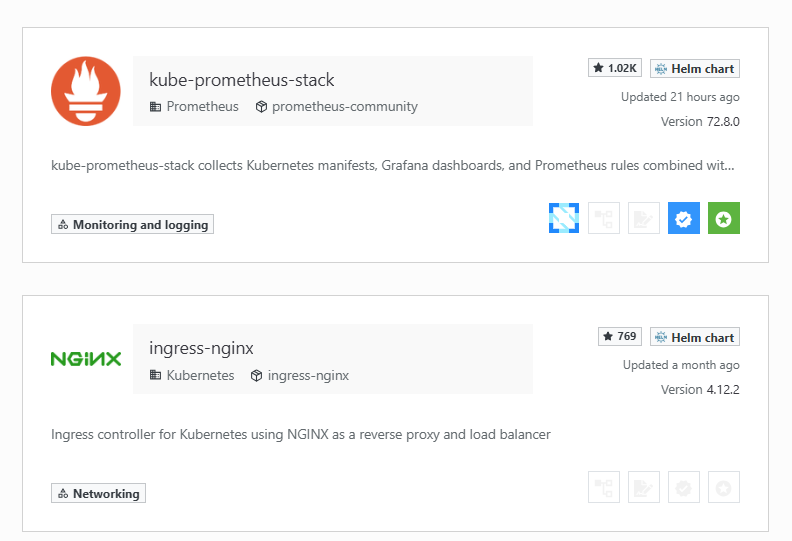
Chart repository is the collection of required configuration files (yaml files required to install specific software). With the help of Chart repository, Helm client will go and talk to K8s API server and install all required software specified in charts in Chart repository

Helm is the best way to find, share and use softwares built for Kubernetes

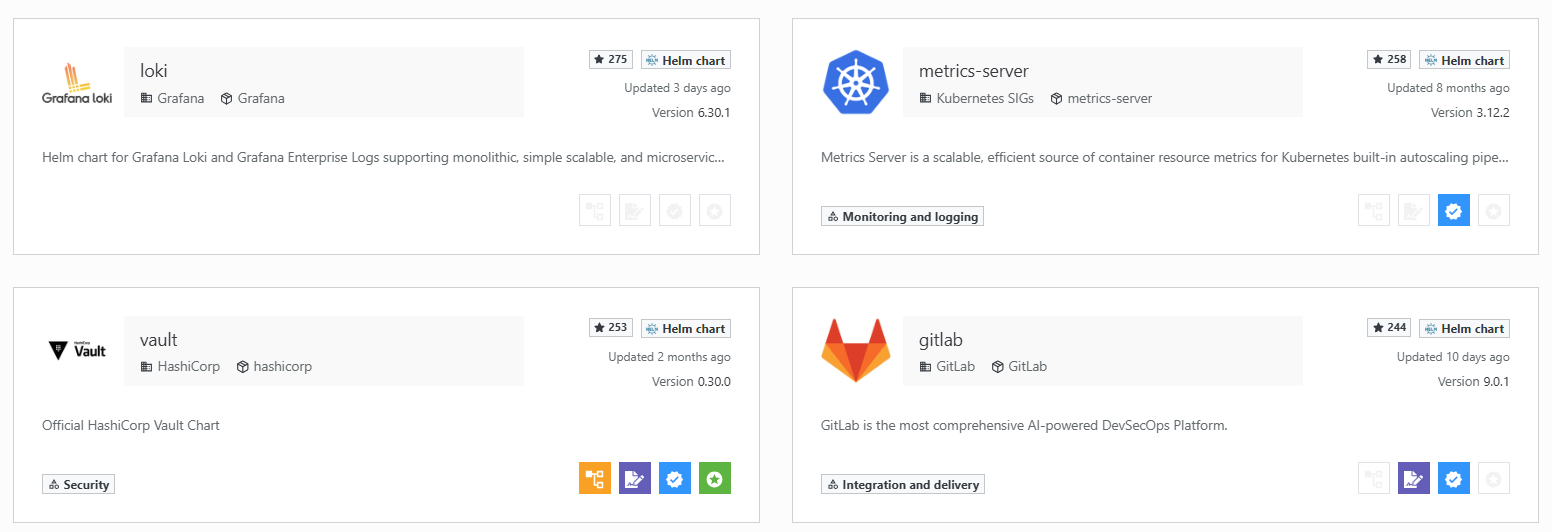
<https://artifacthub.io/>

<https://artifacthub.io/packages/search>

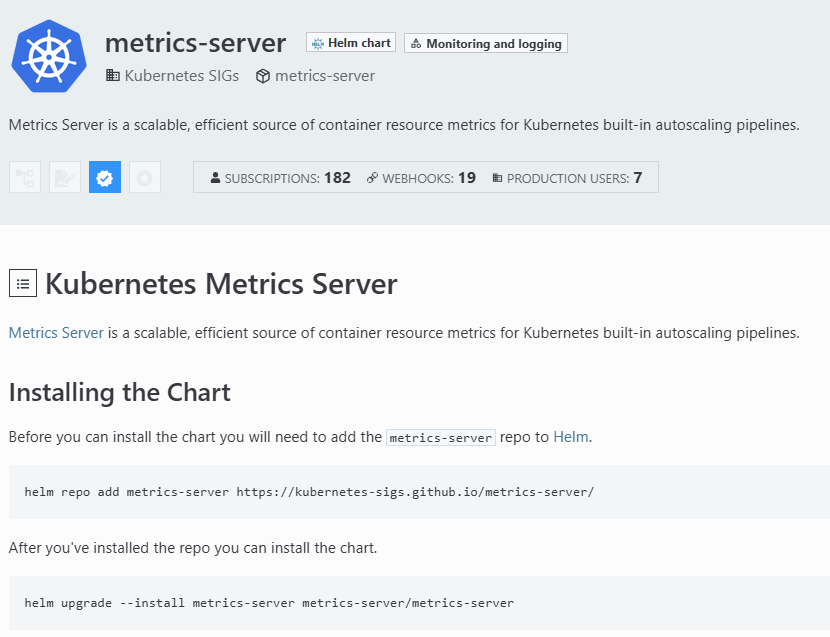




If you want ‘metrics-server’



<https://artifacthub.io/packages/helm/metrics-server/metrics-server>



If youo run this one command, it will take care of all metrics-server installation

helm repo add metrics-server https://kubernetes-sigs.github.io/metrics-server/

Helm charts --> Using Helm charts, we can install Prometheus server, Grafana server, Metrics server, Gitlab etc