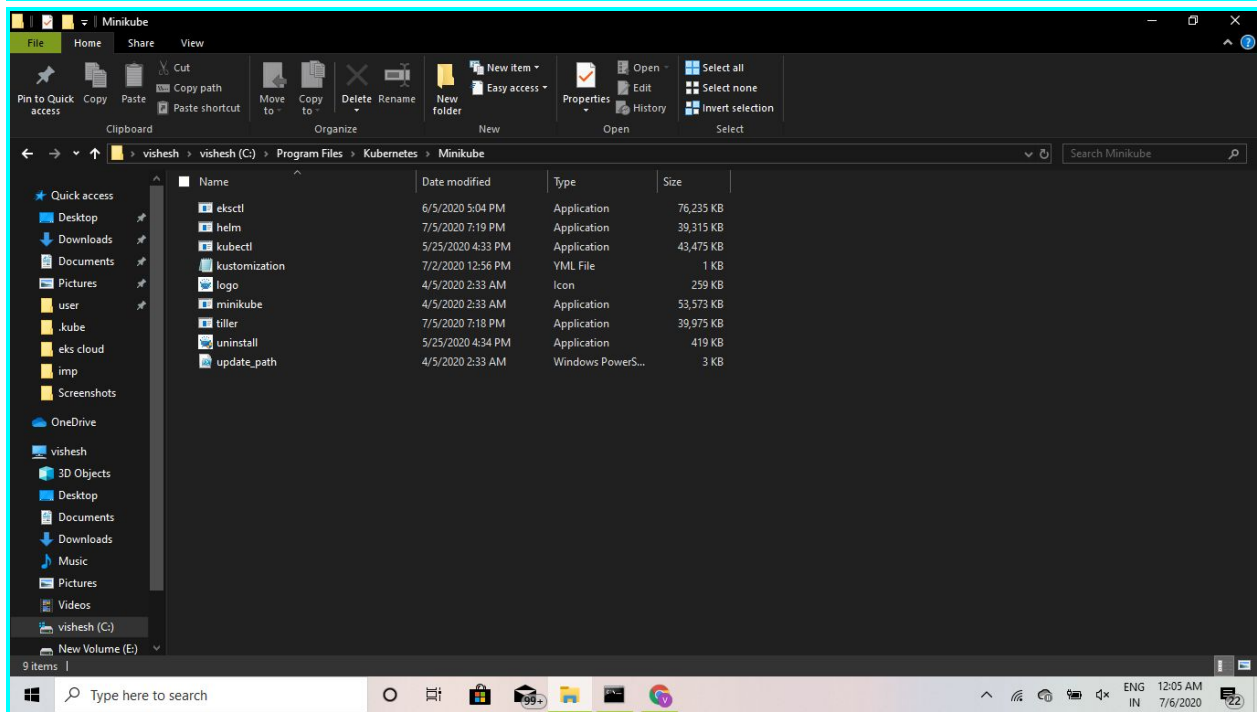
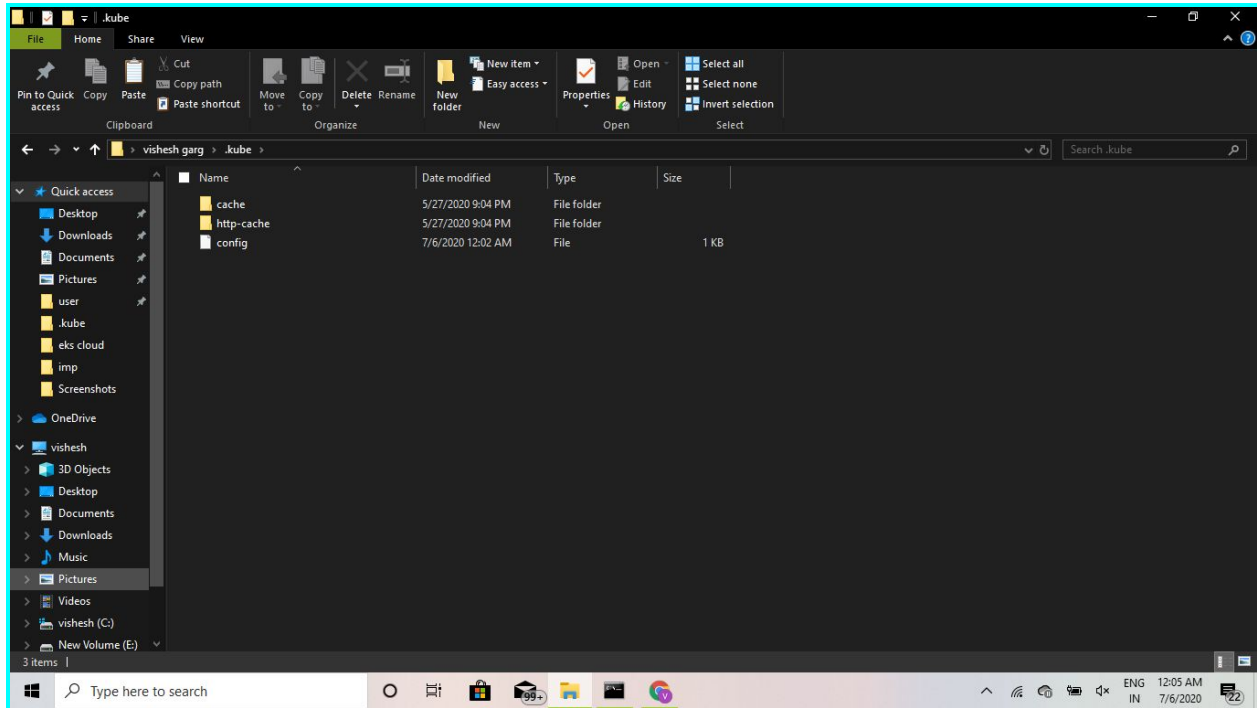


# HELM AND TILLER:



```
C:\Windows\system32>helm init
```

\$HELM\_HOME has been configured at C:\Users\user\.helm.

Tiller (the Helm server-side component) has been installed into your Kubernetes Cluster.

Please note: by default, Tiller is deployed with an insecure 'allow unauthenticated users' policy.  
To prevent this, run `helm init` with the --tiller-tls-verify flag.  
For more information on securing your installation see:  
[https://v2.helm.sh/docs/securing\\_installation/](https://v2.helm.sh/docs/securing_installation/)

```
C:\Windows\system32>kubectl get ns
```

NAME	STATUS	AGE
default	Active	41d
kube-node-lease	Active	41d
kube-public	Active	41d
kube-system	Active	41d
kubernetes-dashboard	Active	19d

```
C:\Windows\system32>tiller version
```

```
[main] 2020/07/06 00:07:51 Starting Tiller v2.16.9 (tls=false)
```

```
[main] 2020/07/06 00:07:51 GRPC listening on :44134
```

```
[main] 2020/07/06 00:07:51 Probes listening on :44135
```

```
[main] 2020/07/06 00:07:51 Storage driver is ConfigMap
```

```
[main] 2020/07/06 00:07:51 Max history per release is 0
```

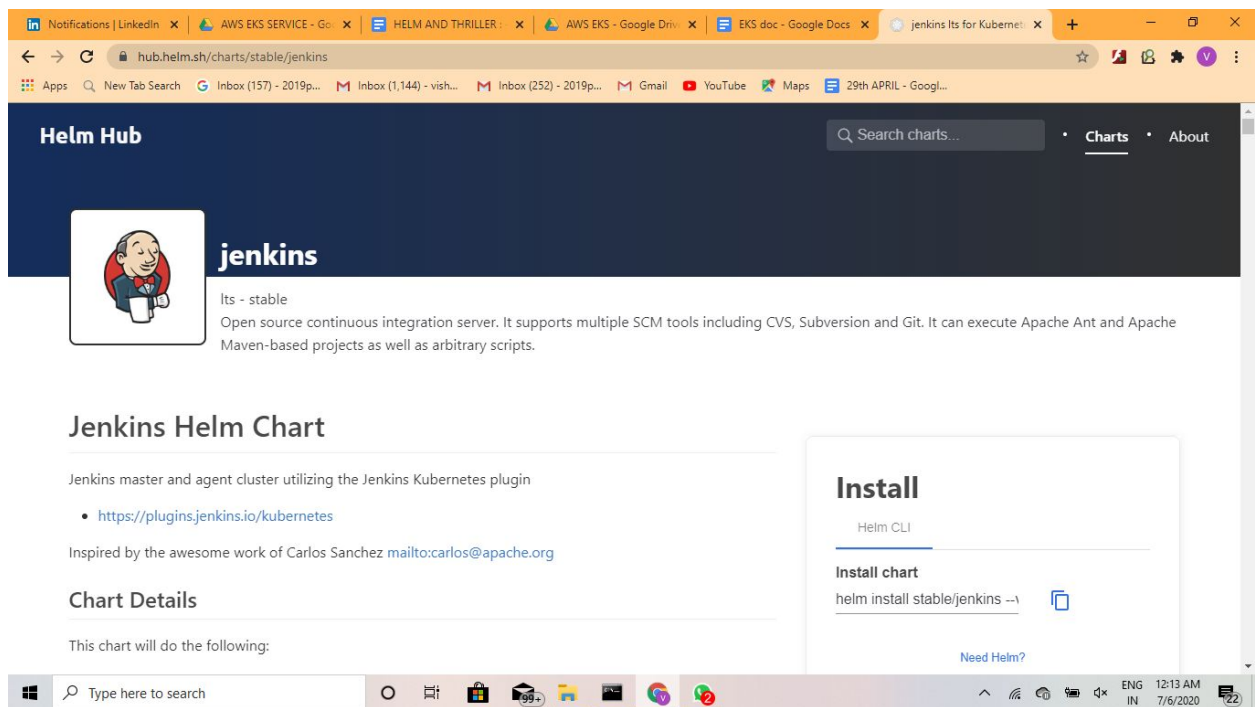
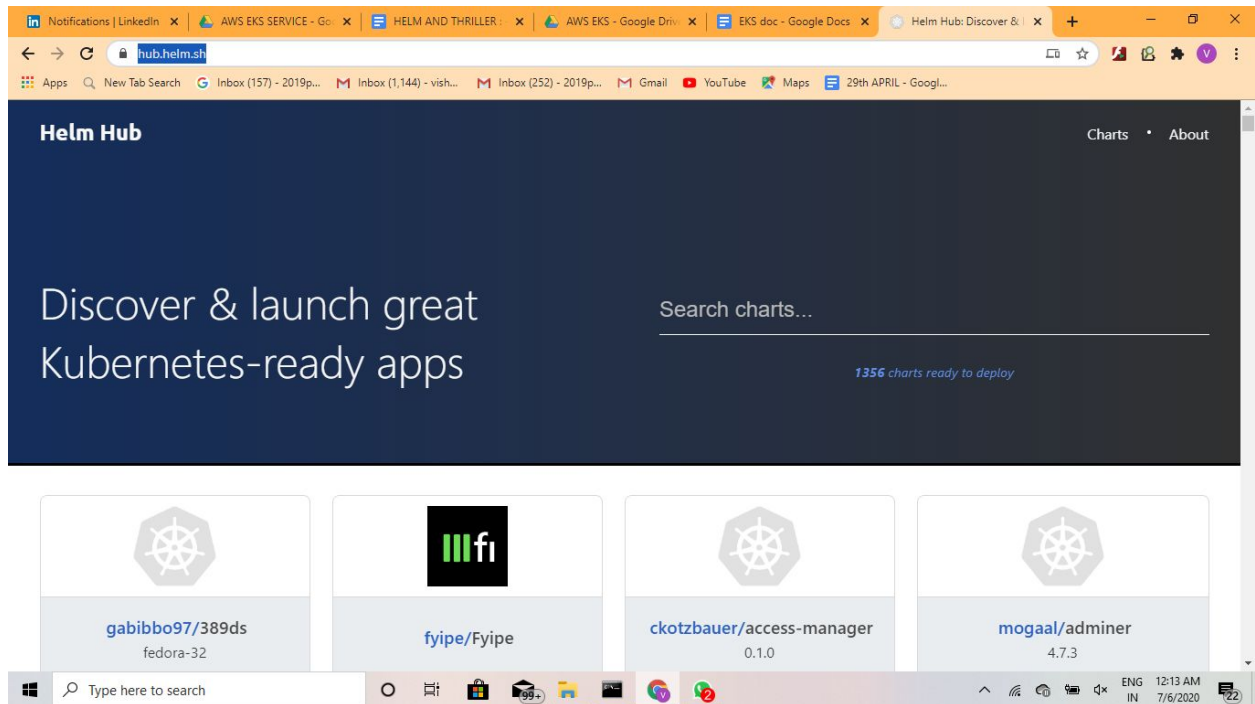
```
C:\Windows\system32>tiller -help
```

Usage of tiller:

-add\_dir\_header

If true, adds the file directory to the header

<https://hub.helm.sh/>



<https://github.com/helm/helm/releases>

```
C:\Windows\system32>helm repo add stable https://kubernetes-charts.storage.googleapis.com/
"stable" has been added to your repositories
```

```
C:\Windows\system32>helm repo list
```

NAME	URL
------	-----

stable	https://kubernetes-charts.storage.googleapis.com/
--------	---

local	http://127.0.0.1:8879/charts
-------	------------------------------

```
C:\Windows\system32>helm repo update
Hang tight while we grab the latest from your chart repositories...
...Skip local chart repository
...Successfully got an update from the "stable" chart repository
Update Complete.
C:\Windows\system32>kubectl -n kube-system create serviceaccount tiller
serviceaccount/tiller created
```

```
C:\Windows\system32>kubectl get ns
NAME          STATUS AGE
default       Active 41d
kube-node-lease Active 41d
kube-public   Active 41d
kube-system   Active 41d
kubernetes-dashboard Active 19d
```

```
C:\Windows\system32>kubectl create clusterrolebinding tiller --clusterrole cluster-admin
--serviceaccount=kube-system:tiller
clusterrolebinding.rbac.authorization.k8s.io/tiller created
```

```
C:\Windows\system32>kubectl get all
NAME          TYPE      CLUSTER-IP  EXTERNAL-IP  PORT(S)  AGE
service/kubernetes ClusterIP  10.96.0.1   <none>       443/TCP  33h
```

```
C:\Windows\system32>kubectl get pods
No resources found in default namespace.
```

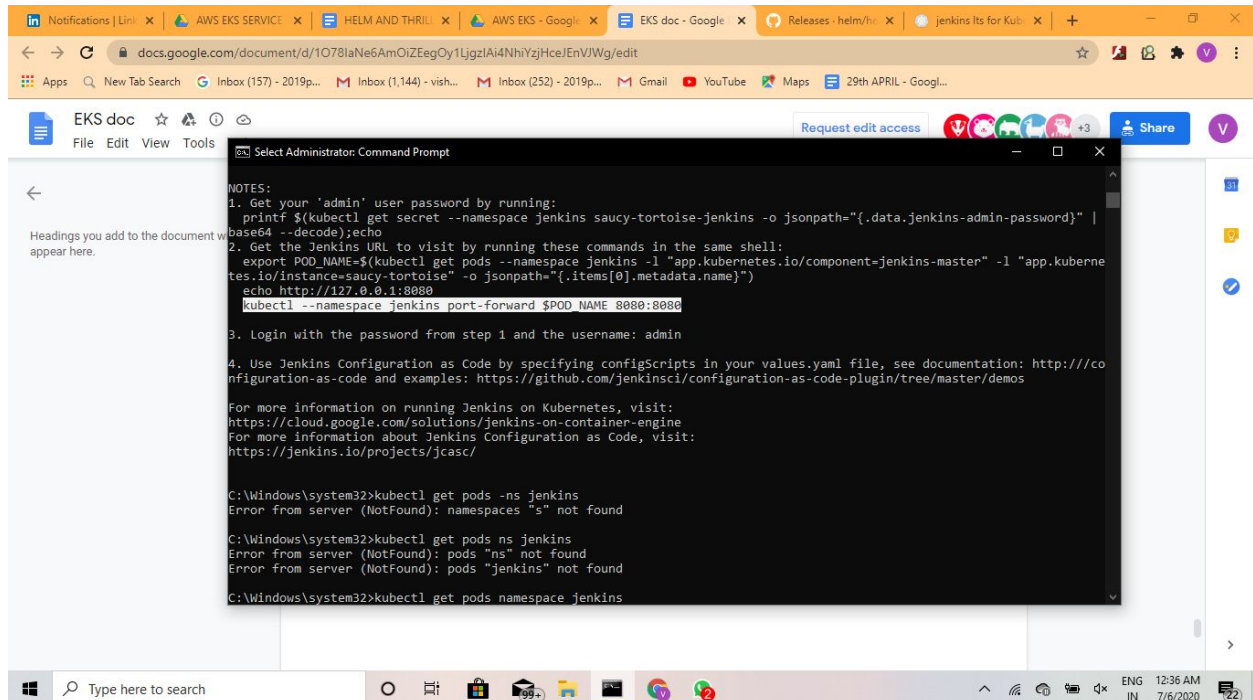
```
C:\Windows\system32>helm init --service-account tiller
$HELM_HOME has been configured at C:\Users\user\.helm.
Warning: Tiller is already installed in the cluster.
(Use --client-only to suppress this message, or --upgrade to upgrade Tiller to the current version.)
```

```
C:\Windows\system32>kubectl get pods --namespace kube-system
NAME                                READY STATUS  RESTARTS AGE
coredns-66bff467f8-9nq8k           1/1   Running  15     41d
coredns-66bff467f8-sdptx           1/1   Running  14     41d
etcd-minikube                       1/1   Running  12     41d
kube-apiserver-minikube             1/1   Running  12     41d
kube-controller-manager-minikube    1/1   Running  12     41d
kube-proxy-f2qqq                   1/1   Running  12     41d
kube-scheduler-minikube            1/1   Running  12     41d
```

```
storage-provisioner      1/1   Running   17      41d
tiller-deploy-fc55974f-rcj45  1/1   Running   0       21m
C:\Windows\system32>kubectl create ns jenkins
namespace/jenkins created
```

```
C:\Windows\system32>kubectl get ns
NAME                STATUS AGE
default             Active 41d
jenkins             Active 4s
kube-node-lease     Active 41d
kube-public         Active 41d
kube-system         Active 41d
kubernetes-dashboard Active 19d
```

> helm install stable/jenkins --version 2.1.2



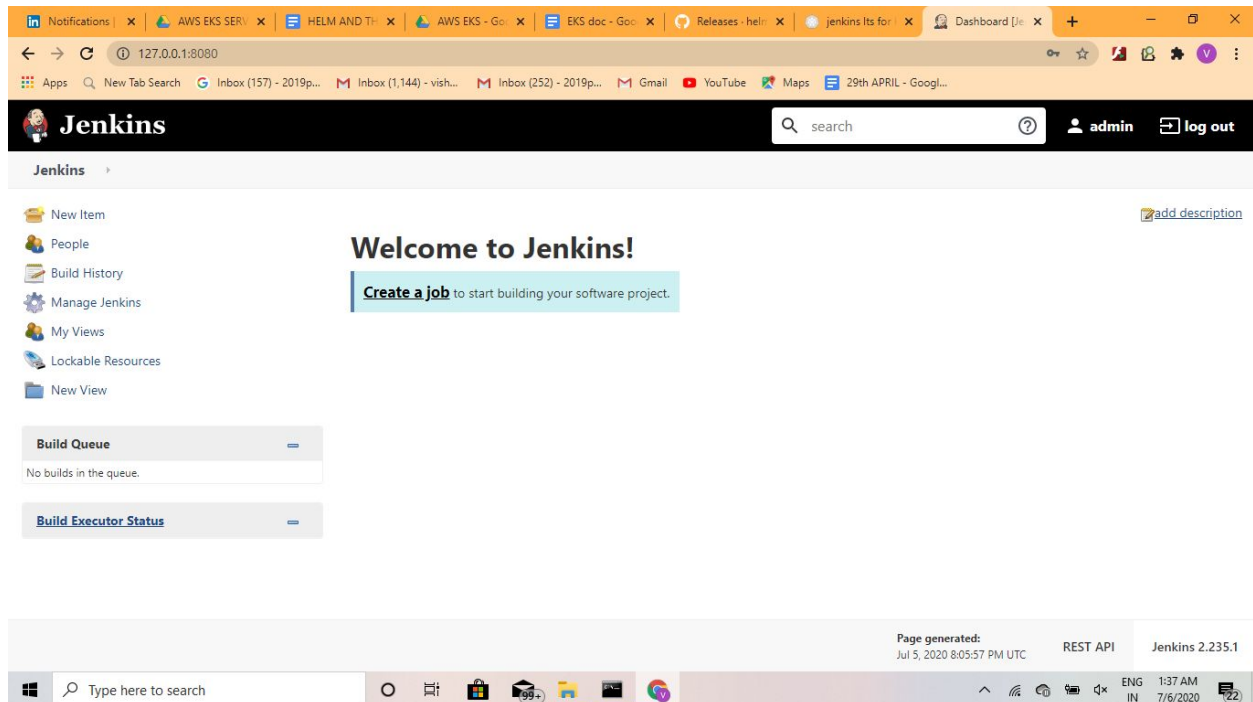
```
C:\Windows\system32>kubectl --namespace jenkins port-forward
saucy-tortoise-jenkins-6684b45d98-7cjnt 8080:8080
C:\Windows\system32>kubectl delete all --all --namespace jenkins
pod "saucy-tortoise-jenkins-6684b45d98-7cjnt" deleted
service "saucy-tortoise-jenkins" deleted
service "saucy-tortoise-jenkins-agent" deleted
deployment.apps "saucy-tortoise-jenkins" deleted
replicaset.apps "saucy-tortoise-jenkins-6684b45d98" deleted
C:\Windows\system32>kubectl get all --namespace jenkins
No resources found in jenkins namespace.
```

The **Alertmanager** handles alerts sent by client applications such as the Prometheus server

```
helm install stable/prometheus --namespace prometheus --set  
alertmanager.persistentVolume.storageClass="gp2" --set server.persistentVolume.storageClass="gp2"
```

```
>> kubectl --namespace jenkins --set alertmanager.persistentVolume.storageClass="gp2"
```

```
>> kubectl --namespace jenkins --set server.persistentVolume.storageClass="gp2"
```



```
C:\Windows\system32>helm install stable/jenkins --version 2.1.2 --namespace jenkins --set  
master.usePodSecurityContext=True --set master.adminPassword="redhat"
```

NAME: quieting-billygoat

LAST DEPLOYED: Mon Jul 6 01:33:48 2020

NAMESPACE: jenkins

STATUS: DEPLOYED

RESOURCES:

==> v1/ConfigMap

NAME	DATA	AGE
quieting-billygoat-jenkins	2	0s
quieting-billygoat-jenkins-jenkins-jcasc-config	1	0s
quieting-billygoat-jenkins-tests	1	0s

==> v1/Deployment

NAME	READY	UP-TO-DATE	AVAILABLE	AGE
quieting-billygoat-jenkins	0/1	1	0	0s

==> v1/PersistentVolumeClaim

NAME	STATUS	VOLUME	CAPACITY	ACCESS MODES
quieting-billygoat-jenkins	Bound	pvc-5970cc3d-3269-48c8-8eba-d0aef89b6ab7	8Gi	RWO
standard	0s			

==> v1/Pod(related)

NAME	READY	STATUS	RESTARTS	AGE
quieting-billygoat-jenkins-8654c5dc75-kzx24	0/2	Init:0/1	0	0s

==> v1/Role

NAME	CREATED AT
quieting-billygoat-jenkins-casc-reload	2020-07-05T20:03:48Z
quieting-billygoat-jenkins-schedule-agents	2020-07-05T20:03:48Z

==> v1/RoleBinding

NAME	ROLE	AGE
quieting-billygoat-jenkins-schedule-agents	Role/quieting-billygoat-jenkins-schedule-agents	0s
quieting-billygoat-jenkins-watch-configmaps	Role/quieting-billygoat-jenkins-casc-reload	0s

==> v1/Secret

NAME	TYPE	DATA	AGE
quieting-billygoat-jenkins	Opaque	2	0s

==> v1/Service

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
quieting-billygoat-jenkins	ClusterIP	10.102.22.195	<none>	8080/TCP	0s
quieting-billygoat-jenkins-agent	ClusterIP	10.97.36.11	<none>	50000/TCP	0s

==> v1/ServiceAccount

NAME	SECRETS	AGE
quieting-billygoat-jenkins	1	0s

NOTES:

1. Get your 'admin' user password by running:

```
printf $(kubectl get secret --namespace jenkins quieting-billygoat-jenkins -o  
jsonpath="{.data.jenkins-admin-password}" | base64 --decode);echo
```

2. Get the Jenkins URL to visit by running these commands in the same shell:

```
export POD_NAME=$(kubectl get pods --namespace jenkins -l
"app.kubernetes.io/component=jenkins-master" -l
"app.kubernetes.io/instance=quieting-billygoat" -o jsonpath="{.items[0].metadata.name}")
echo http://127.0.0.1:8080
kubectl --namespace jenkins port-forward $POD_NAME 8080:8080
```

3. Login with the password from step 1 and the username: admin

4. Use Jenkins Configuration as Code by specifying configScripts in your values.yaml file, see documentation: <http://configuration-as-code> and examples: <https://github.com/jenkinsci/configuration-as-code-plugin/tree/master/demos>

For more information on running Jenkins on Kubernetes, visit:  
<https://cloud.google.com/solutions/jenkins-on-container-engine>  
For more information about Jenkins Configuration as Code, visit:  
<https://jenkins.io/projects/jcasc/>

```
C:\Windows\system32>kubectl get pods -n jenkins
NAME                                READY STATUS RESTARTS AGE
quieting-billygoat-jenkins-8654c5dc75-kzx24 1/2 Running 0 90s
```

```
C:\Windows\system32>kubectl --namespace jenkins port-forward
quieting-billygoat-jenkins-8654c5dc75-kzx24 8080:8080
Forwarding from 127.0.0.1:8080 -> 8080
Forwarding from [::1]:8080 -> 8080
```

```
C:\Windows\system32>kubectl get secret quieting-billygoat-jenkins --namespace jenkins -o
yaml
apiVersion: v1
data:
  jenkins-admin-password: cmVkaGF0
  jenkins-admin-user: YWRtaW4=
kind: Secret
metadata:
  creationTimestamp: "2020-07-05T20:03:48Z"
  labels:
    app.kubernetes.io/component: jenkins-master
    app.kubernetes.io/instance: quieting-billygoat
    app.kubernetes.io/managed-by: Tiller
    app.kubernetes.io/name: jenkins
    helm.sh/chart: jenkins-2.1.2
  managedFields:
  - apiVersion: v1
```



```
fieldsType: FieldsV1
fieldsV1:
  f:data:
    .: {}
    f:jenkins-admin-password: {}
    f:jenkins-admin-user: {}
  f:metadata:
    f:labels:
      .: {}
      f:app.kubernetes.io/component: {}
      f:app.kubernetes.io/instance: {}
      f:app.kubernetes.io/managed-by: {}
      f:app.kubernetes.io/name: {}
      f:helm.sh/chart: {}
    f:type: {}
manager: Go-http-client
operation: Update
time: "2020-07-05T20:03:48Z"
name: quieting-billygoat-jenkins
namespace: jenkins
resourceVersion: "428698"
selfLink: /api/v1/namespaces/jenkins/secrets/quieting-billygoat-jenkins
uid: 3af17e1d-d26d-4a7b-8ec3-2950076e77d1
type: Opaque
```

For prometheus:

The [Alertmanager](#) handles alerts sent by client applications such as the Prometheus server

```
helm install stable/prometheus --namespace prometheus --set
alertmanager.persistentVolume.storageClass="gp2" --set server.persistentVolume.storageClass="gp2"
```

```
>> kubectl --namespace jenkins --set alertmanager.persistentVolume.storageClass="gp2"
```

```
>> kubectl --namespace jenkins --set server.persistentVolume.storageClass="gp2"
```

Browser tabs: AWS EKS SER, HELM AND T, AWS EKS - Go, EKS doc - Go, Releases - hel, jenkins Its for, Dashboard [i, helm promethi

Address bar: google.com/search?q=helm+prometheus+chart&coq=helm+prometheus+chart&aqs=chrome.0.0i8.5439j0j7&sourceid=chrome&ie=UTF-8

Search results for "helm prometheus chart":

- About 3,37,000 results (0.33 seconds)
- github.com > helm > charts > tree > master > stable > pro...  
[Prometheus Helm - GitHub](#)  
No information is available for this page.  
Learn why
- hub.helm.sh > charts > stable > prometheus  
[prometheus 2.19.0 for Kubernetes | Helm Hub | Monocular](#)  
This **chart** bootstraps a **Prometheus** deployment on a Kubernetes cluster using the **Helm** package manager. Prerequisites: Kubernetes 1.3+ with Beta APIs ...
- hub.helm.sh > charts > cloudposse > prometheus  
[prometheus for Kubernetes | Helm Hub | Monocular](#)  
To install the **chart** with the release name my-release : `$ helm install opsgoodness/prometheus --name my-release`. The command deploys **Prometheus** on the ...

Taskbar: Type here to search, Task View, File Explorer, Mail, Edge, Chrome, System tray (Network, Volume, Bluetooth, Date/Time: 1:45 AM 7/6/2020, Language: ENG IN)