

# Creating a Kubernetes Cluster with Jenkins X

This lesson provides the link to gists that you can use to create a Kubernetes cluster with Jenkins X. Moreover, it also gives some steps to follow before we continue with the chapter.

## We'll cover the following

- Create a new cluster and install Jenkins X
  - GKE
  - EKS
  - AKS
- Install Jenkins X in an existing serverless cluster
- Removing jx-prow project

You can skip this section if you kept the cluster from the previous chapter and it contains serverless Jenkins X. Otherwise, we'll need to create a new Jenkins X cluster.



All the commands from this chapter are available in the [13-pipeline-extension-model.sh](#) Gist.

## Create a new cluster and install Jenkins X #

For your convenience, the Gists that will create a new serverless Jenkins X cluster or install it inside an existing one are as follows.

### GKE #

Create a new serverless **GKE** cluster:

[gke-jx-serverless.sh](#)



## EKS #

Create a new serverless **EKS** cluster:

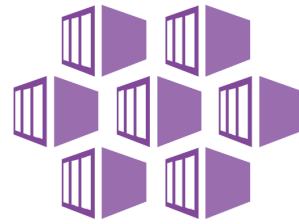
[eks-jx-serverless.sh](#)



## AKS #

Create a new serverless **AKS** cluster:

[aks-jx-serverless.sh](#)



## Install Jenkins X in an existing serverless cluster #

Use an **existing** serverless cluster: [install-serverless.sh](#)

## Removing **jx-prow** project #

We will not need the **jx-prow** project we created in the previous chapter. If you are reusing the cluster and Jenkins X installation, you might want to remove it and save a bit of resource.



Please replace [...] with your GitHub user before executing the commands that follow.

```
GH_USER=[...]
```

```
jx delete application \  
  $GH_USER/jx-prow \  
  --batch-mode
```



The commands that follow will reset your *go-demo-6* **master** with the contents of the **versioning** branch that contains all the changes we did so far.

Please execute them only if you are unsure whether you did all the exercises correctly.

```
cd go-demo-6

git pull

git checkout versioning-tekton

git merge -s ours master --no-edit

git checkout master

git merge versioning-tekton

git push

cd ..
```

If you ever restored a branch at the beginning of a chapter, the chances are that there is a reference to my user ( `vfarcic` ). We'll change that to the Google project since that's what Knative will expect as the location of the container images.



Please execute the commands that follow only if you are using **GKE** and if you ever restored a branch at the beginning of a chapter (like in the snippet above).

```
cd go-demo-6

cat charts/go-demo-6/Makefile \
| sed -e \
"s@vfarcic@$PROJECT@g" \
| sed -e \
"s@devops-26@$PROJECT@g" \
| tee charts/go-demo-6/Makefile

cat charts/preview/Makefile \
| sed -e \
"s@vfarcic@$PROJECT@g" \
| sed -e \
"s@devops-26@$PROJECT@g" \
| tee charts/preview/Makefile

cat skaffold.yaml \
| sed -e \
"s@vfarcic@$PROJECT@g" \
| sed -e \
"s@devops-26@$PROJECT@g" \
| tee skaffold.yaml

cd
```



If you destroyed the cluster at the end of the previous chapter, you'll need to import the *go-demo-6* application again. Please execute the commands that follow only if you created a new cluster specifically for the exercises from this chapter.

```
cd go-demo-6

jx import --batch-mode

jx get activities \
  --filter go-demo-6 \
  --watch

cd ..
```



Now we can explore Jenkins X Pipeline Extension Model.