



Deploy Jenkins From a Helm Chart

Project Astra

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Deploy Jenkins From a Helm Chart

Learn how to exercise the Project Astra beta program workflow by deploying Jenkins from a Helm chart. After you deploy Jenkins on your cluster, you can register the application with Project Astra.

Jenkins is a validated app for the Project Astra Beta program. [Learn the difference between Validated and Standard apps.](#)

Requirements

The following requirements are necessary for installing and running Jenkins on a Kubernetes cluster for the Project Astra beta program.

Compatibility Requirements

Only the current version of Jenkins (5.0.26) has been officially validated for use with Project Astra. Other versions may work, but may only run as a standard application.

Project Astra does not support the [Kubernetes plugin for Jenkins](#) at this time. This functionality will be added soon. You can run Jenkins in a Kubernetes cluster without the plugin. The plugin provides scalability to your Jenkins cluster.

System Requirements

- A new Kubernetes cluster which has been added to Project Astra.
- [Helm \(version 3.2+\)](#) and [kubect](#)l installed on your local computer.
- Kubeconfig configured using the gcloud tool with a command like `gcloud container clusters get-credentials my-cluster-name`

Namespace Requirements

You must deploy your app in a namespace other than the default. In the following example, we create and use the namespace `jenkins` for the deployment.

In the following example, we use `&&` to concatenate the commands for creating the namespace and deploying the app. We recommend this approach, as it ensures the commands are run in sequence even if you get interrupted.

We recommend the use of `&&` instead of `;` to concatenate commands. `&&` is conditional, and only runs the second command if the first command completes successfully.



You must deploy your app after the cluster is added to Project Astra, not before.

Install Jenkins

To exercise the Project Astra beta workflow, we recommend you use the Bitnami Helm chart. Add the Bitnami chart repo:

```
helm repo add bitnami https://charts.bitnami.com/bitnami
```



You must deploy the Helm chart in a namespace other than the default.

Create the `jenkins` namespace and deploy Jenkins into it with the command:

```
kubectl create namespace jenkins && helm install jenkins --namespace jenkins --set  
persistence.storageClass=netapp-cvs-perf-premium,persistence.size=100Gi bitnami/jenkins
```

This does the following:

- Creates the `jenkins` namespace.
- Sets the correct storage class.
- Sets the persistent volume storage size to 100Gi.

After the Helm chart is deployed, it will be automatically detected by Project Astra. You can then register the app with Project Astra.

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