# **■** NetApp

# **Deploy apps**

Astra

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# **Deploy apps**

## **Deploy Jenkins from a Helm chart**

Learn how to deploy Jenkins from the Bitnami Helm chart. After you deploy Jenkins on your cluster, you can register the application with Astra Control.

Jenkins is a validated app for Astra Control. Learn the difference between Validated and Standard apps.



Applications deployed from Google Marketplace have not been validated. Some users report issues with discovery and/or backup with Google Marketplace deployments of Postgres, MariaDB, and MySQL.

#### Requirements

- A GKE cluster that has been added to Astra Control Service.
- Updated versions of Helm (version 3.2+) and Kubectl installed.
- Kubeconfig configured using the gcloud tool with a command like gcloud container clusters getcredentials my-cluster-name

Astra Control does not currently support the Kubernetes plugin for Jenkins. You can run Jenkins in a Kubernetes cluster without the plugin. The plugin provides scalability to your Jenkins cluster.

#### **Install Jenkins**

Two important notes on this process:

- You must deploy your app after the cluster is added to Astra Control, not before.
- You must deploy the Helm chart in a namespace other than the default.

Add the Bitnami chart repo:

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

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
```

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

After the pods are online, you can manage the app with Astra Control. Astra Control allows you to manage an app at the namespace level or using a helm label

### **Deploy MariaDB from a Helm chart**

Learn how to deploy MariaDB from the Bitnami Helm chart. After you deploy MariaDB on your cluster, you can manage the application with Astra Control.

MariaDB is a validated app for Astra Control. Learn the difference between Validated and Standard apps.



Applications deployed from the Google and Azure Marketplaces have not been validated. Some users report issues with discovery and/or backup with Google Marketplace deployments of Postgres, MariaDB, and MySQL.

#### Requirements

- A GKE or AKS cluster that has been added to Astra Control Service.
- Updated versions of Helm (version 3.2+) and Kubectl installed.
- Kubeconfig configured using the gcloud tool with a command like gcloud container clusters getcredentials my-cluster-name
- Kubeconfig configured using the az tool with a command like az aks get-credentials --resource -group resource-group-name --name aks-cluster-name

#### **Install MariaDB**

Two important notes on this process:

- You must deploy your app after the cluster is added to Astra Control, not before.
- You must deploy the Helm chart in a namespace other than the default.

Add the Bitnami chart repo:

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

#### Deploy MariaDB with the command:

```
helm install mariadb bitnami/mariadb --namespace testdb --create-namespace --set db.database=test_db,db.user=test_db_user,db.password=choose-your-password > /dev/null 2>&1
```

- Creates the testdb namespace.
- Deploys MariaDB on the testdb namespace.
- Creates a database named test db

• Creates a user test db user with the password that you provided.



This method of setting the password at deployment is insecure. We do not recommend this for a production environment.

After the pods are online, you can manage the app with Astra Control. Astra Control allows you to manage an app at the namespace level or using a helm label

### Deploy MySQL from a Helm chart

Learn how to deploy MySQL from the standard stable chart. After you deploy MySQL on your Kubernetes cluster, you can manage the application with Astra Control.

MySQL is a validated app for Astra Control. Learn the difference between Validated and Standard apps.



Applications deployed from Google Marketplace have not been validated. Some users report issues with discovery and/or backup with Google Marketplace deployments of Postgres, MariaDB, and MySQL.

#### Requirements

- A GKE cluster that has been added to Astra Control Service.
- Updated versions of Helm (version 3.2+) and Kubectl installed.
- Kubeconfig configured using the gcloud tool with a command like gcloud container clusters getcredentials my-cluster-name

### **Install MySQL**

Two important notes on this process:

- You must deploy your app after the cluster is added to Astra Control, not before.
- We recommend that you deploy the Helm chart in a namespace other than the default.

Add the Bitnami chart repo:

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

Deploy MySQL with the command:

```
helm install mysql bitnami/mysql --namespace testdb --create-namespace --set db.database=test_db,db.user=test_db_user,db.password=NKhjs2wQPt8
```

- Creates the testdb namespace.
- Deploys MySQL on the testdb namespace.

- Creates a database named test db
- Creates a user test db user with password NKhjs2wQPt8



This method of setting the password at deployment is insecure. We do not recommend this for a production environment.

After the pods are online, you can manage the app with Astra Control. Astra Control allows you to manage an app with its name, at the namespace level, or by using a helm label.

# **Deploy Postgres from a Helm chart**

Learn how to deploy Postgres from the Bitnami Helm chart. After you deploy Postgres on your cluster, you can register the application with Astra Control.

Postgres is a validated app for Astra Control. Learn the difference between Validated and Standard apps.



Applications deployed from Google Marketplace have not been validated. Some users report issues with discovery and/or backup with Google Marketplace deployments of Postgres, MariaDB, and MySQL.

#### Requirements

- A fresh GKE cluster which has been added to Astra Control Service.
- Updated versions of Helm (version 3.2+) and Kubectl installed.
- Kubeconfig configured using the gcloud tool with a command like gcloud container clusters getcredentials my-cluster-name

#### **Install Postgres**

Two important notes on this process:

- You must deploy your app after the cluster is added to Astra Control, not before.
- You must deploy the Helm chart in a namespace other than the default.

Add the Bitnami chart repo:

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

Deploy Postgres with the command:

```
kubectl create namespace testdb && helm install bitnami/postgresql
--namespace testdb --set
postgresqlPassword=U9dH9HT4pWS,postgresqlDatabase=test_db --generate-name
```

- Creates the testdb namespace.
- Deploys Postgres on the testdb namespace.
- Creates a database named test db
- Creates a user test db user with password U9dH9HT4pWS



This method of setting the password at deployment is insecure. We do not recommend this for a production environment.

After the pods are online, you can manage the app with Astra Control. Astra Control allows you to manage an app at the namespace level or using a helm label.

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