



## **Deploy apps**

### **Astra Control Center**

NetApp

March 15, 2022

# Table of Contents

- Deploy apps ..... 1
  - Deploy Jenkins from a Helm chart ..... 1
  - Deploy MariaDB from a Helm chart ..... 2
  - Deploy MySQL from a Helm chart ..... 3
  - Deploy Postgres from a Helm chart ..... 5

# 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 a validated app and a standard app in Astra Control Service.](#)
- [Learn the difference between a validated app and a standard app in Astra Control Center.](#)

These instructions apply to both Astra Control Service and Astra Control Center.



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 cluster that has been added to Astra Control.



For Astra Control Center, you can add the cluster to Astra Control Center first or add the app first.

- Updated versions of Helm (version 3.2+) and Kubectl installed on a local machine with the proper kubeconfig for the cluster

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 Service, not before. Astra Control Center will accept applications before or after the cluster is added to Astra Control Center.
- You must deploy the Helm chart in a namespace other than the default.

## Steps

1. Add the Bitnami chart repo:

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

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

```
Helm install <name> --namespace <namespace> --create-namespace --set  
persistence.storageClass=<storage_class>
```



If the volume size is changed, use Kibibyte (Ki), Mebibyte (Mi) or Gibibyte (Gi) units.

You need to define the storage class only in these situations:

- You are using Astra Control Service and you don't want to use the default storage class.
- You are using Astra Control Center and haven't yet imported the cluster into Astra Control Center. Or, you have imported the cluster, but don't want to use the default storage class.

## Result

This does the following:

- Creates a namespace.
- Sets the correct storage class.

After the pods are online, you can manage the app with Astra Control. Astra Control enables you to manage an app at the namespace level or by 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.

- [Learn the difference between a validated app and a standard app in Astra Control Service.](#)
- [Learn the difference between a validated app and a standard app in Astra Control Center.](#)

These instructions apply to both Astra Control Service and Astra Control Center.



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 cluster that has been added to Astra Control.



For Astra Control Center, you can add the cluster to Astra Control Center first or add the app first.

- Updated versions of Helm (version 3.2+) and Kubectl installed on a local machine with the proper kubeconfig for the cluster

## Install MariaDB

Two important notes on this process:

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

### Steps

1. Add the Bitnami chart repo:

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

2. Deploy MariaDB with the command:

```
Helm install <name> --namespace <namespace> --create-namespace --set  
persistence.storageClass=<storage_class>
```



If the volume size is changed, use Kibibyte (Ki), Mebibyte (Mi) or Gibibyte (Gi) units.

You need to define the storage class only in these situations:

- You are using Astra Control Service and you don't want to use the default storage class.
- You are using Astra Control Center and haven't yet imported the cluster into Astra Control Center. Or, you have imported the cluster, but don't want to use the default storage class.

### Result

This does the following:

- Creates a namespace.
- Deploys MariaDB on the namespace.
- Creates a database.



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 enables you to manage an app at the namespace level or by using a helm label.

## Deploy MySQL from a Helm chart

Learn how to deploy MySQL from the [Bitnami Helm 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 a validated app and a standard app in Astra Control Service.](#)

- [Learn the difference between a validated app and a standard app in Astra Control Center.](#)

These instructions apply to both Astra Control Service and Astra Control Center.



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 cluster that has been added to Astra Control.



For Astra Control Center, you can add the cluster to Astra Control Center first or add the app first.

- Updated versions of Helm (version 3.2+) and Kubectl installed on a local machine with the proper kubeconfig for the cluster

## Install MySQL

Two important notes on this process:

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

### Steps

1. Add the Bitnami chart repo:

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

2. Deploy MySQL with the command:

```
Helm install <name> --namespace <namespace> --create-namespace --set persistence.storageClass=<storage_class>
```



If the volume size is changed, use Kibibyte (Ki), Mebibyte (Mi) or Gibibyte (Gi) units.

You need to define the storage class only in these situations:

- You are using Astra Control Service and you don't want to use the default storage class.
- You are using Astra Control Center and haven't yet imported the cluster into Astra Control Center. Or, you have imported the cluster, but don't want to use the default storage class.

### Result

This does the following:

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

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.

- [Learn the difference between a validated app and a standard app in Astra Control Service.](#)
- [Learn the difference between a validated app and a standard app in Astra Control Center.](#)

These instructions apply to both Astra Control Service and Astra Control Center.



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 cluster that has been added to Astra Control.



For Astra Control Center, you can add the cluster to Astra Control Center first or add the app first.

- Updated versions of Helm (version 3.2+) and Kubectl installed on a local machine with the proper kubeconfig for the cluster

## Install Postgres

Two important notes on this process:

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

### Steps

1. Add the Bitnami chart repo:

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

2. Deploy Postgres with the command:

```
Helm install <name> --namespace <namespace> --create-namespace --set  
persistence.storageClass=<storage_class>
```



If the volume size is changed, use Kibibyte (Ki), Mebibyte (Mi) or Gibibyte (Gi) units.

You need to define the storage class only in these situations:

- You are using Astra Control Service and you don't want to use the default storage class.
- You are using Astra Control Center and haven't yet imported the cluster into Astra Control Center. Or, you have imported the cluster, but don't want to use the default storage class.

## Result

This does the following:

- Creates a namespace.
- Deploys Postgres on the namespace.

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



## Copyright Information

Copyright © 2022 NetApp, Inc. All rights reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means-graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system-without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

## Trademark Information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.