



Deploy Jenkins From a Helm Chart

Project Astra

Erika Barcott
September 28, 2020

This PDF was generated from <https://docs.netapp.com/us-en/project-astra/solutions/jenkins-deploy-from-helm-chart.html> on September 29, 2020. Always check docs.netapp.com for the latest.

Table of Contents

- Deploy Jenkins From a Helm Chart 1
 - Requirements 1
 - Install Jenkins 1

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.

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 [kubectl](#) 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.

Copyright Information

Copyright © 2020 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.