Jenkins

Project Astra

NetApp November 17, 2020

 $This\ PDF\ was\ generated\ from\ https://docs.netapp.com/us-en/project-astra/solutions/solutions/jenkins-deploy-from-helm-chart.html\ on\ November\ 17,\ 2020.\ Always\ check\ docs.netapp.com\ for\ the\ latest.$



Table of Contents

Jenkins	1
Deploy Jenkins From a Helm Chart	1

Jenkins

Deploy Jenkins From a Helm Chart

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

Jenkins is a validated app for the 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 Astra beta program.

Compatibility Requirements

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

Astra does not support the <u>Kubernetes plugin for Jenkins</u> at this time. This functionality will be added soon. You can run Jenkins in a <u>Kubernetes cluster</u> without the plugin. The plugin provides scalability to your Jenkins cluster.

System Requirements

- A new Kubernetes cluster which has been added to 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 getcredentials 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 88 instead of; to concatenate commands. 88 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 Astra, not before.

Install Jenkins

To exercise the 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 Astra. You can then register the app with 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 systemwithout 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.