

Configuring Kubernetes Cluster

NetApp Solutions

Dorian Henderson, Kevin Hoke April 06, 2021

Table of Contents

Configuring Kubernetes Cluster	 	1
Cloud Deployment Kubernetes Configuration	 	1
On-Premises Deployment Kubernetes Configuration	 	3

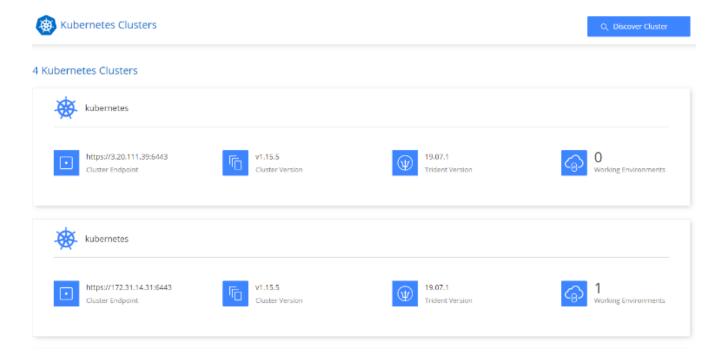
Configuring Kubernetes Cluster

This section is divided into two parts for cloud and on-premises deployment respectively.

Cloud Deployment Kubernetes Configuration

Through NetApp Cloud Manager, you can define the connection to the Iguazio Kubernetes cluster. Trident requires access to multiple resources in the cluster to make the volume available.

- 1. To enable access, obtain the Kubernetes config file from one the Iguazio nodes. The file is located under /home/Iguazio/.kube/config. Download this file to your desktop.
- 2. Go to Discover Cluster to configure.



3. Upload the Kubernetes config file. See the following image.

Upload Kubernetes Configuration File

Upload the Kubernetes configuration file (kubeconfig) so Cloud Manager can install Trident on the Kubernetes cluster.

Connecting Cloud Volumes ONTAP with a Kubernetes cluster enables users to request and manage persistent volumes using native Kubernetes interfaces and constructs. Users can take advantage of ONTAP's advanced data management features without having to know anything about it. Storage provisioning is enabled by using NetApp Trident.

Learn more about Trident for Kubernetes.

Upload File

4. Deploy Trident and associate a volume with the cluster. See the following image on defining and assigning a Persistent Volume to the Iguazio cluster. This process creates a Persistent Volume (PV) in Iguazio's Kubernetes cluster. Before you can use it, you must define a Persistent Volume Claim (PVC).

Persistent Volumes for Kubernetes Connected with Kubernetes Cluster Cloud Volumes ONTAP is connected to 1 Kubernetes cluster. View Cluster 1 You can connect another Kubernetes cluster to this Cloud Volumes ONTAP system. If the Kubernetes cluster is in a different network than Cloud Volumes ONTAP, specify a custom export policy to provide access to clients. Kubernetes Cluster Custom Export Policy (Optional) (ii) Select Kubernetes Cluster Custom Export Policy kubernetes 172.31.0.0/16 Set as default storage class NFS ○ iSCSI Connect Cancel

On-Premises Deployment Kubernetes Configuration

For on-premises installation of NetApp Trident, see TR-4798 for details. After configuring your Kubernetes cluster and installing NetApp Trident, you can connect Trident to the Iguazio cluster to enable NetApp data management capabilities, such as taking Snapshot copies of your data and model.

Next: Define Persistent Volume Claim

Copyright Information

Copyright © 2021 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.