

# **Add Kubernetes clusters**

**Kubernetes clusters** 

NetApp April 16, 2024

This PDF was generated from https://docs.netapp.com/us-en/bluexp-kubernetes/task/task-kubernetes-discover-aws.html on April 16, 2024. Always check docs.netapp.com for the latest.

# **Table of Contents**

Add Kubernetes clusters	1
Add an Amazon Kubernetes cluster to BlueXP	1
Add an Azure Kubernetes cluster to BlueXP	3
Add a Google Cloud Kubernetes cluster to BlueXP	6
Import an OpenShift cluster to BlueXP	9

# **Add Kubernetes clusters**

# Add an Amazon Kubernetes cluster to BlueXP

You can discover or import Kubernetes clusters to BlueXP so you can back up persistent volumes to Amazon S3.

## **Discover a cluster**

You can discover a fully-managed or self-managed Kubernetes cluster. Managed clusters must be discovered; they cannot be imported.

- 1. On the Canvas, click Add Working Environment.
- 2. Select Amazon Web Services > Kubernetes Cluster > Discover.

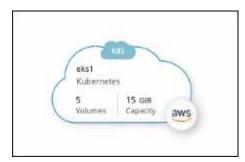
Microsoft Azure	aws Amazon Web Services	Google Cloud Platform	On-Premises	
	Selec	t Type		
Cloud Volumes ONTA Single Node	P	Discover Existing	Add new	~
Cloud Volumes ONTA High Availability	NP HA	Discover Existing	Add new	$\sim$
(FS) Amazon FSx for ONT. (High Availability)	AP	Discover Existing	Add new	$\sim$
Kubernetes Cluster Any			Discover	]~

- 3. Select Discover Cluster and click Next.
- 4. Choose an AWS region, select a Kubernetes cluster, and click **Next**.

Add Existing Kubernetes Clu	ster Disc	over a Kubernetes Cluster		×
	instance Profile Account Details	642991768967 Account ID	Switch Account	
	Choose an AW	/S region and then select a Kubernetes clust	ier.	
	AWS Region US West (N. Califo	ornia)	•	
1 Cluster				۹
Kubernetes Cluster Name	🗧 📔 Status	÷ Kubernetes Version	÷   VPC	÷
eksTest	active	1.21	vpc-5825393a	
		Previous Next		Q

#### Result

BlueXP adds the Kubernetes cluster to the Canvas.



### **Import a Cluster**

You can import a self-managed Kubernetes cluster using a Kubernetes configuration file.

- 1. On the Canvas, click Add Working Environment.
- 2. Select Amazon Web Services > Kubernetes Cluster > Discover.
- 3. Select Import Cluster and click Next.
- 4. Upload a Kubernetes configuration file in YAML format.

Add Existing Kubernetes Cluster	Import Kubernetes Clus	ster	
	Upload a Kubernetes configuration file that's	in YAML format	
	Kubernetes configuration file		
	minicubeconfig.txt	1 Upload	
1 Cluster			Q
Kubernetes Cluster Name	t Kubernetes Type	÷ Kubernetes Version	. +
🕑 test2	Self Managed	v1.24.0	

5. Select the Kubernetes cluster and click Next.

#### Result

BlueXP adds the Kubernetes cluster to the Canvas.

# Add an Azure Kubernetes cluster to BlueXP

You can discover or import Kubernetes clusters to BlueXP so that you can back up persistent volumes to Azure.

# **Discover a cluster**

You can discover a fully-managed or self-managed Kubernetes cluster. Managed clusters must be discovered; they cannot be imported.

- 1. On the Canvas, click Add Working Environment.
- 2. Select Microsoft Azure > Kubernetes Cluster > Discover.

Microsoft Azure	aws Amazon Web Services	Google Cloud Platform	On-Premises	
	Selec	t Type		
Cloud Volumes ONT/ Single Node	λP	Discover Existing	Add new	$\sim$
Cloud Volumes ONT/ High Availability	AP HA	Discover Existing	Add new	~
Azure NetApp Files High Availability			Discover	~
Kubernetes Cluster Any			Discover	<b>)</b> ~

- 3. Select **Discover Cluster** and click **Next**.
- 4. Select a Kubernetes cluster and click **Next**.

Add Existing Kubernetes Clu	ster			Discover a Kubernetes C	luster		
			AzureKeys Credential Name	Subscription1 Azure Subscription	Switch Azure Subscription	]	
				Select a Kubernetes cluster	r.		
	3 Kube	ernetes Clusters					Q
		Kubernetes Cluster Name	\$ Status	Kubernetes Version	Resource Group	¢ Location	•
	•	Cluster_1	Active	10.2.23.36	Cell text	Cell text	
	$\bigcirc$	Cluster_2	Active	10.2.23.36	Cell text	Cell text	
	$\bigcirc$	Cluster_2	Active	10.2.23.36	Cell text	Cell text	

#### Result

MyK8sClus	ster	
Kubernete		
56	12.5 TiB	
Volumes	Capacity	

### **Import a Cluster**

You can import a self-managed Kubernetes cluster using a Kubernetes configuration file.

# Before you get started

You will need Certificate Authority, Client Key, and Client Certificate certificates for the user specified in the cluster role YAML file to import Kubernetes clusters. The Kubernetes cluster administrator receives these certifications when creating users on the Kubernetes cluster.

#### Steps

- 1. On the Canvas, click Add Working Environment.
- 2. Select Microsoft Azure > Kubernetes Cluster > Discover.
- 3. Select Import Cluster and click Next.
- 4. Upload a Kubernetes configuration file in YAML format.

Add Existing Kubernetes Cluster	Import Kubernetes Clu	ister	
	Upload a Kubernetes configuration file that	's in YAML format	
	Kubernetes configuration file		
	minicubeconfig.txt	1 Upload	
1 Cluster			Q
Kubernetes Cluster Name	t Kubernetes Type	÷ Kubernetes Version	÷.
✓ test2	Self Managed	v1.24.0	

5. Upload the cluster certificates provided by your Kubernetes cluster administrator.

#### Result

# Add a Google Cloud Kubernetes cluster to BlueXP

You can discover or import Kubernetes clusters to BlueXP so that you can back up persistent volumes to Google Cloud.

### **Discover a cluster**

You can discover a fully-managed or self-managed Kubernetes cluster. Managed clusters must be discovered; they cannot be imported.

- 1. On the Canvas, click Add Working Environment.
- 2. Select Google Cloud Platform > Kubernetes Cluster > Discover.

Microsoft Azure	aws Amazon Web Services	Google Cloud Platform	On-Premises	
	Selec	t Type		
Cloud Volumes ON Single Node	ΆΡ	Discover Existing	Add new	~
Cloud Volumes ONT (High Availability)	АР НА	Discover Existing	Add new	~
Cloud Volumes Serv (High Availability)	ice		Discover	~
Kubernetes Cluster Any			Discover	<b>)</b> ~

- 3. Select **Discover Cluster** and click **Next**.
- 4. To select a Kubernetes cluster in a different Google Cloud Project, click **Edit project** and choose an available project.

	Discover	a Kubernetes Cluste	er	
	<b>Default project</b> Google Cloud Project		Edit Project	
	Choose Coogle Cloud P Edit project	agion and than coloct a Kuba	motos elustor	1
	Google Cloud Project Default project		▼	
Name				÷
		Apply	Cancel	

5. Select a Kubernetes cluster and click **Next**.

	Dis	cover a Kubernetes Cluste	er		
	CloudSync-De Google Cloud	Edit Pr	roject		
		Select a Kubernetes cluster.			
3 Clusters					Q
Kubernetes Cluster Name	\$ Status	÷ Kubernetes Version	\$   VPC	¢   Location	¢
cluster-1	Running	1.21.6-gke.1500	default	us-central1-c	
test-cluster-1	Running	1.20.10-gke.1600	default	us-central1	
kerengke1702	Running	1.21.6-gke.1500	default	europe-west3	

### Result

MyK8sClus Kubernete	
56	12.5 TiB
Volumes	Capacity

### **Import a Cluster**

You can import a self-managed Kubernetes cluster using a Kubernetes configuration file.

# Before you get started

You will need Certificate Authority, Client Key, and Client Certificate certificates for the user specified in the cluster role YAML file to import Kubernetes clusters. The Kubernetes cluster administrator receives these certifications when creating users on the Kubernetes cluster.

- 1. On the Canvas, click Add Working Environment.
- 2. Select Google Cloud Platform > Kubernetes Cluster > Discover.
- 3. Select Import Cluster and click Next.
- 4. Upload a Kubernetes configuration file in YAML format.

Add Existing Kubernetes Cluster	Import Kubernetes Cluster				
	Upload a Kubernetes co	onfiguration file that's in YAML format and has t	he extension ".txt", ".kubecon	fig", or ".config"	
		Kubernetes configuration file			
		KubConfig.txt	1 Upload		
З Киbe	ernetes Clusters				Q
	Kubernetes Cluster Name	≎   Kubernetes Type	<b>\$</b>	Kubernetes Version	•
Ø	Cluster_1	???		10.2.23.36	
$\bigcirc$	Cluster_2	777		10.2.23.36	
$\bigcirc$	Cluster_2	777		10.2.23.36	

BlueXP adds the Kubernetes cluster to the Canvas.

# Import an OpenShift cluster to BlueXP

Import a self-managed OpenShift cluster to BlueXP so you can start backing up persistent volumes to your Cloud provider.

# **Import a Cluster**

You can import a self-managed Kubernetes cluster using a Kubernetes configuration file.

#### Before you begin

Before importing an OpenShift cluster, you need:

- The `kubeconfig-sa`file you created in create a kubeconfig file.
- The public Certificate Authority (for example, ca.crt), Client Key (for example, tls.key), and Client Certification (for example, tls.crt) files for the cluster.

#### Steps

- 1. On the Canvas, select Add Working Environment.
- 2. Select your Cloud provider and select Kubernetes Cluster > Discover.
- 3. Select Import Cluster then Next.
- 4. Upload the kubeconfig-sa file you created in create a kubeconfig file. Select the Kubernetes cluster and select Next.

Add Existing Kubernetes Cluster	Import Kubernetes Clu	ister	
	Upload a Kubernetes configuration file that	's in YAML format	
	Kubernetes configuration file		
	minicubeconfig.txt	1 Upload	
1 cluster			Q
Kubernetes Cluster Name	÷   Kubernetes Type	÷   Kubernetes Version	. +
✓ test2	Self Managed	v1.24.0	

5. Upload the cluster certificates.

	Upload Cluster C	ertificates
To co	omplete the import, upload the fo	llowing cluster certificates.
	Certificate Authority	
	No file selected	1
	Client Key	
	No file selected	2
	Client Certificate	
	No file selected	1

#### Result

#### **Copyright information**

Copyright © 2024 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.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

#### **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.