



Add Kubernetes clusters

Kubernetes clusters

NetApp
April 16, 2024

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

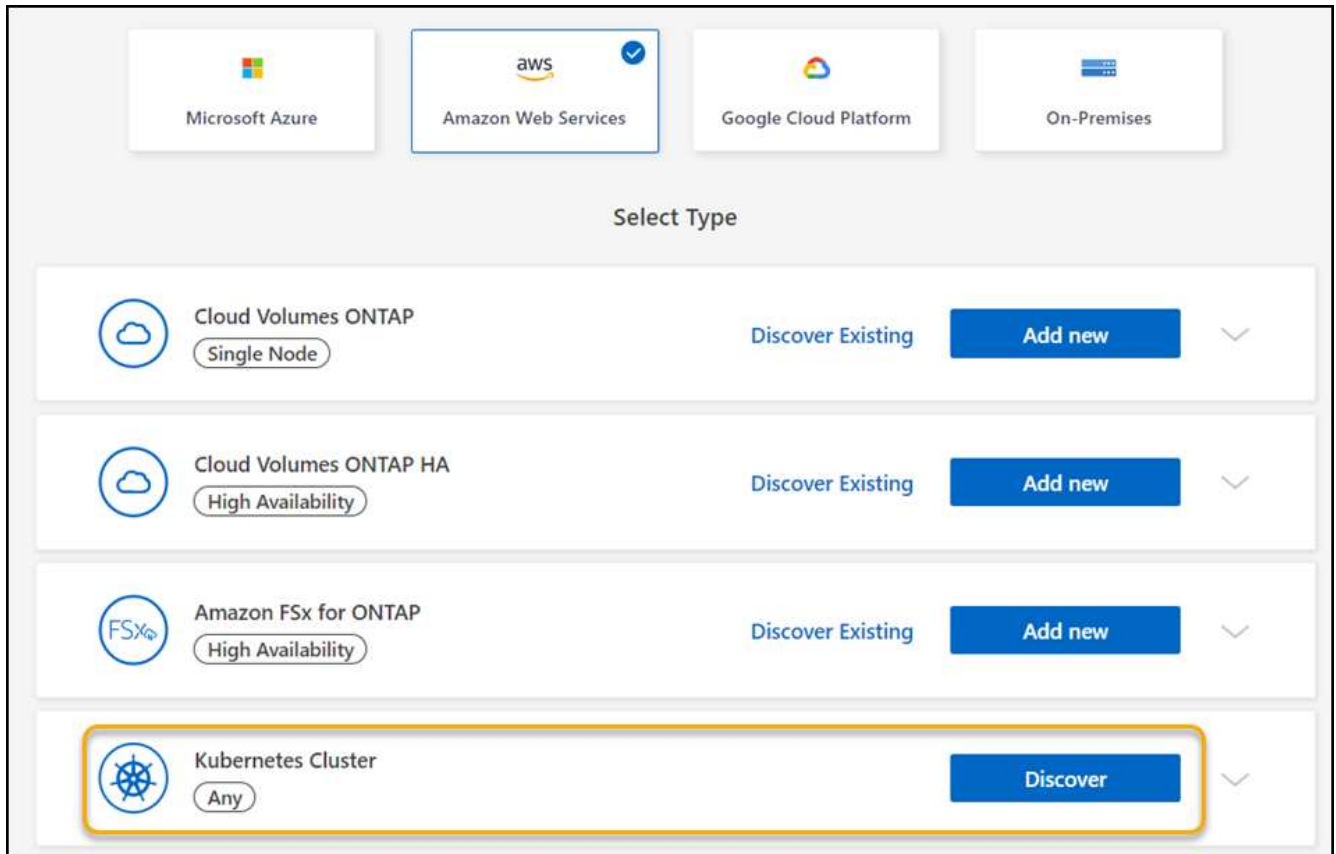
You can discover or import Kubernetes clusters to BlueXP so you can back up persistent volumes to Amazon S3.

Discover a cluster

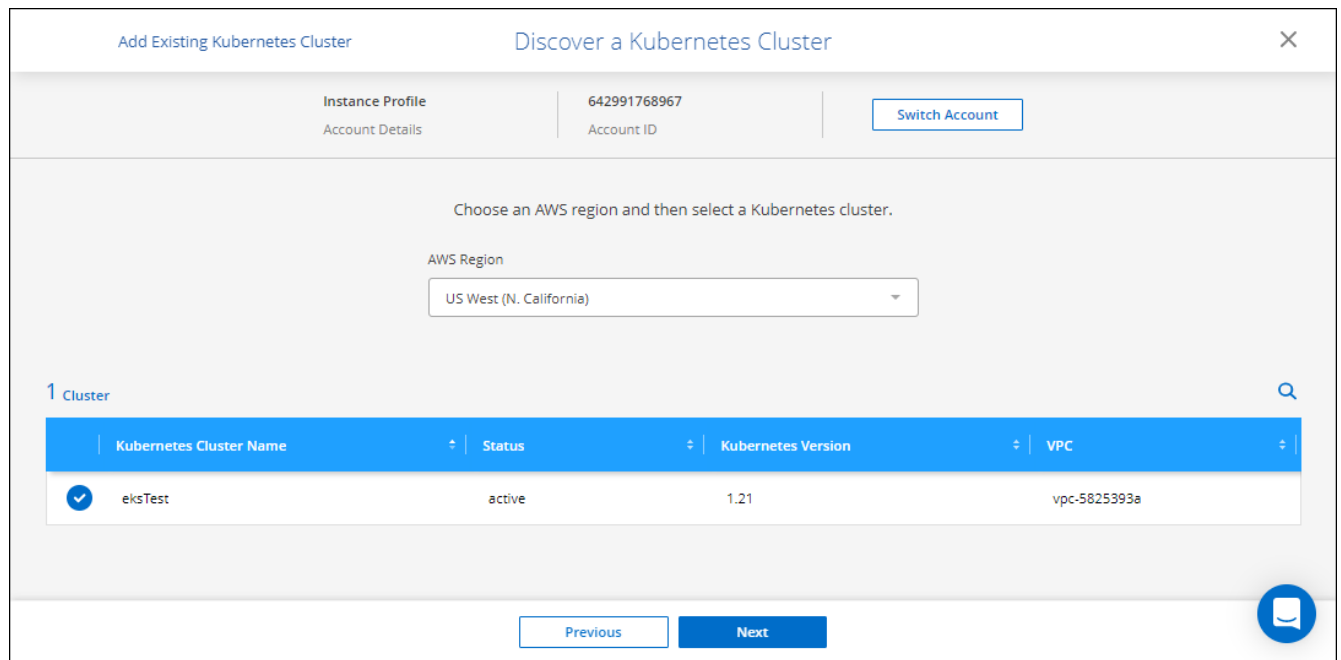
You can discover a fully-managed or self-managed Kubernetes cluster. Managed clusters must be discovered; they cannot be imported.

Steps

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



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



Result

BlueXP adds the Kubernetes cluster to the Canvas.

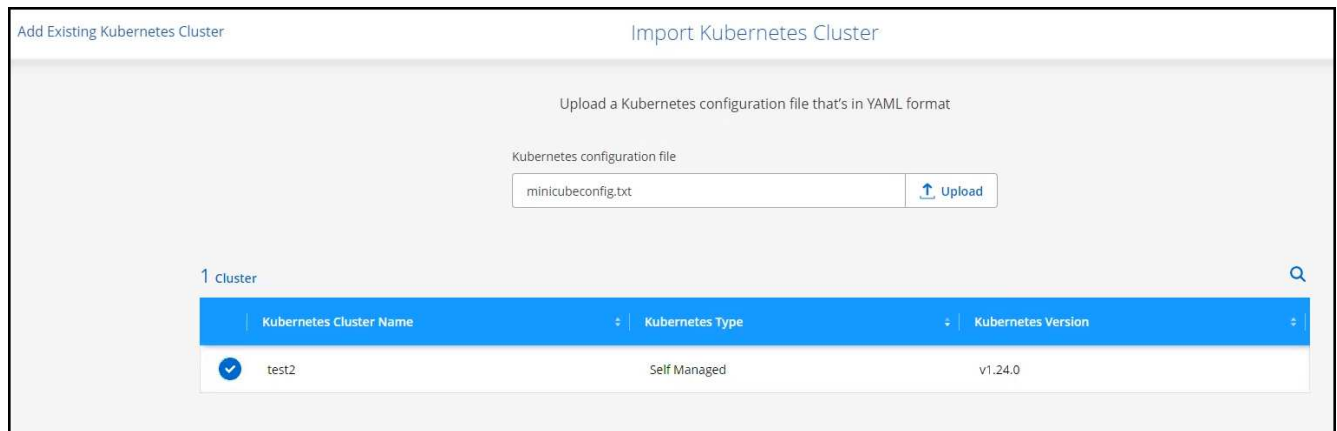


Import a Cluster

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

Steps

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.



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

Result

BlueXP adds the Kubernetes cluster to the Canvas.

Add an Azure Kubernetes cluster to BlueXP

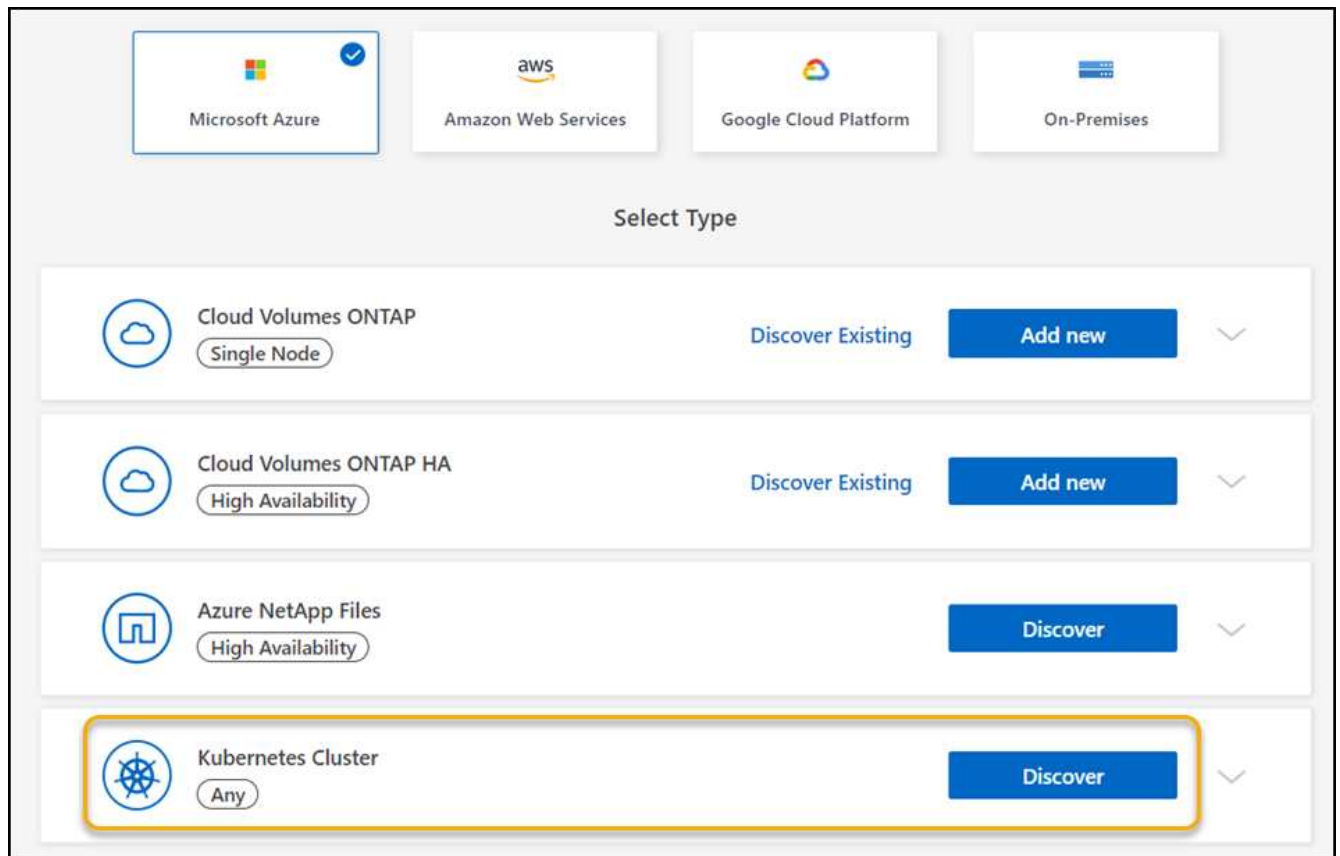
You can discover or import Kubernetes clusters to BlueXP so that you can back up persistent volumes to Azure.

Discover a cluster

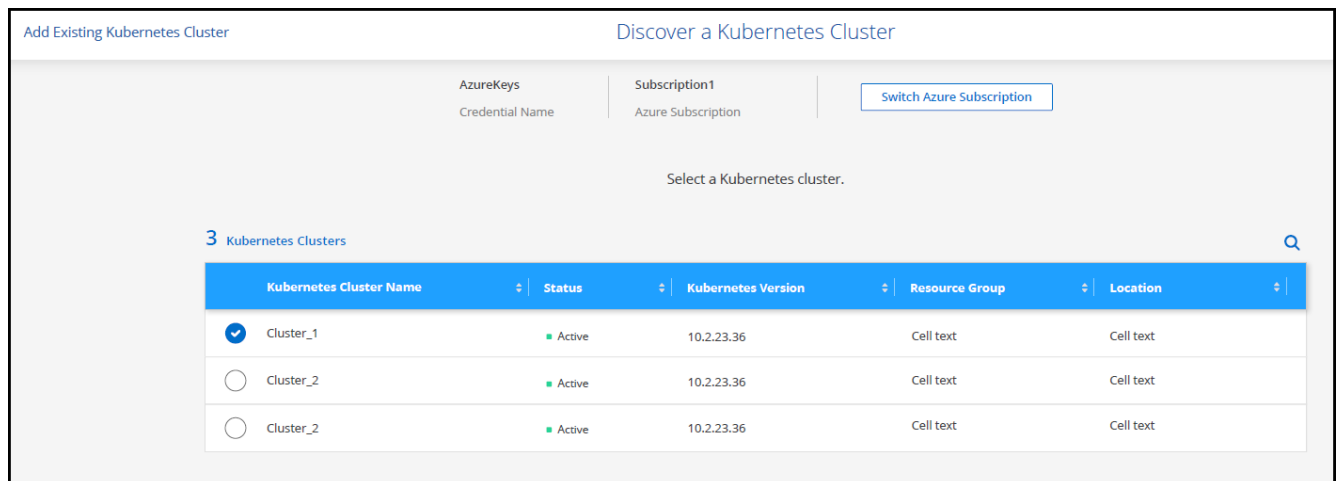
You can discover a fully-managed or self-managed Kubernetes cluster. Managed clusters must be discovered; they cannot be imported.

Steps

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

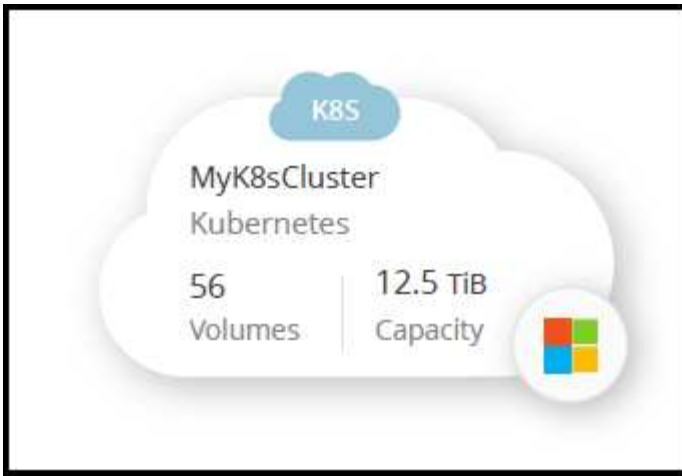


3. Select **Discover Cluster** and click **Next**.
4. Select a Kubernetes cluster and click **Next**.



Result

BlueXP adds the Kubernetes cluster to the Canvas.



Import a Cluster

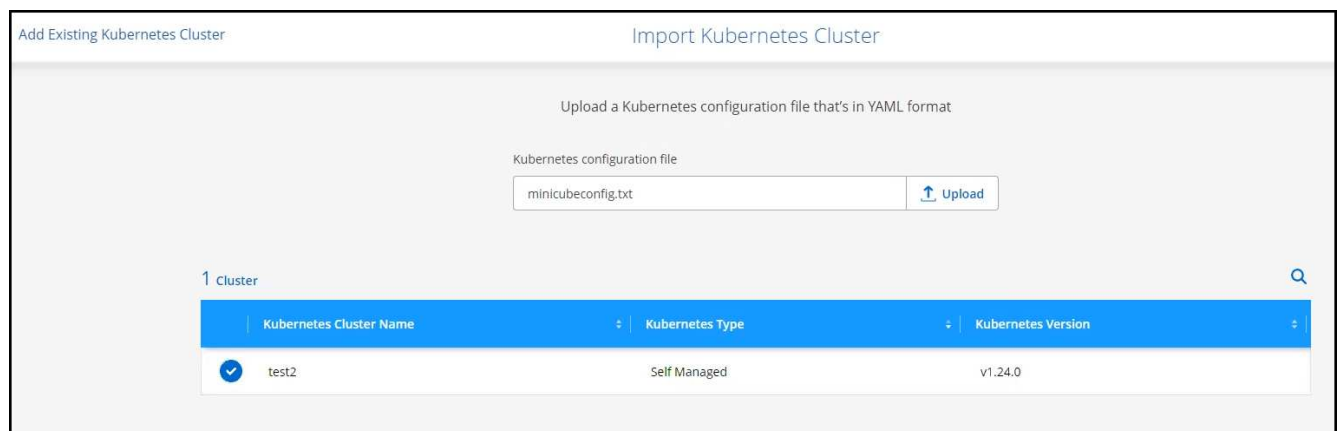
You can import a self-managed Kubernetes cluster using a Kubernetes configuration file.

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.



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

Result

BlueXP adds the Kubernetes cluster to the Canvas.

Add a Google Cloud Kubernetes cluster to BlueXP

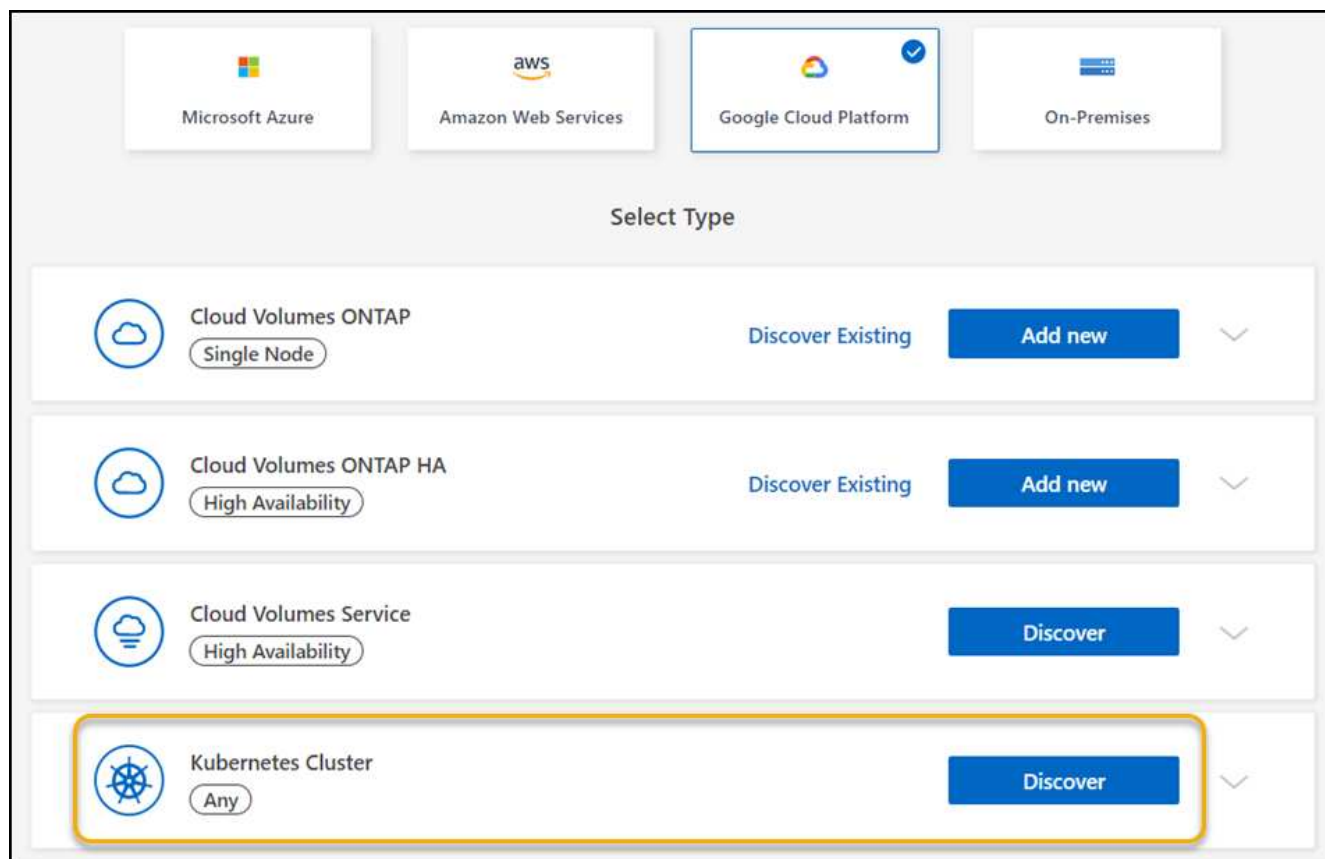
You can discover or import Kubernetes clusters to BlueXP so that you can back up persistent volumes to Google Cloud.

Discover a cluster

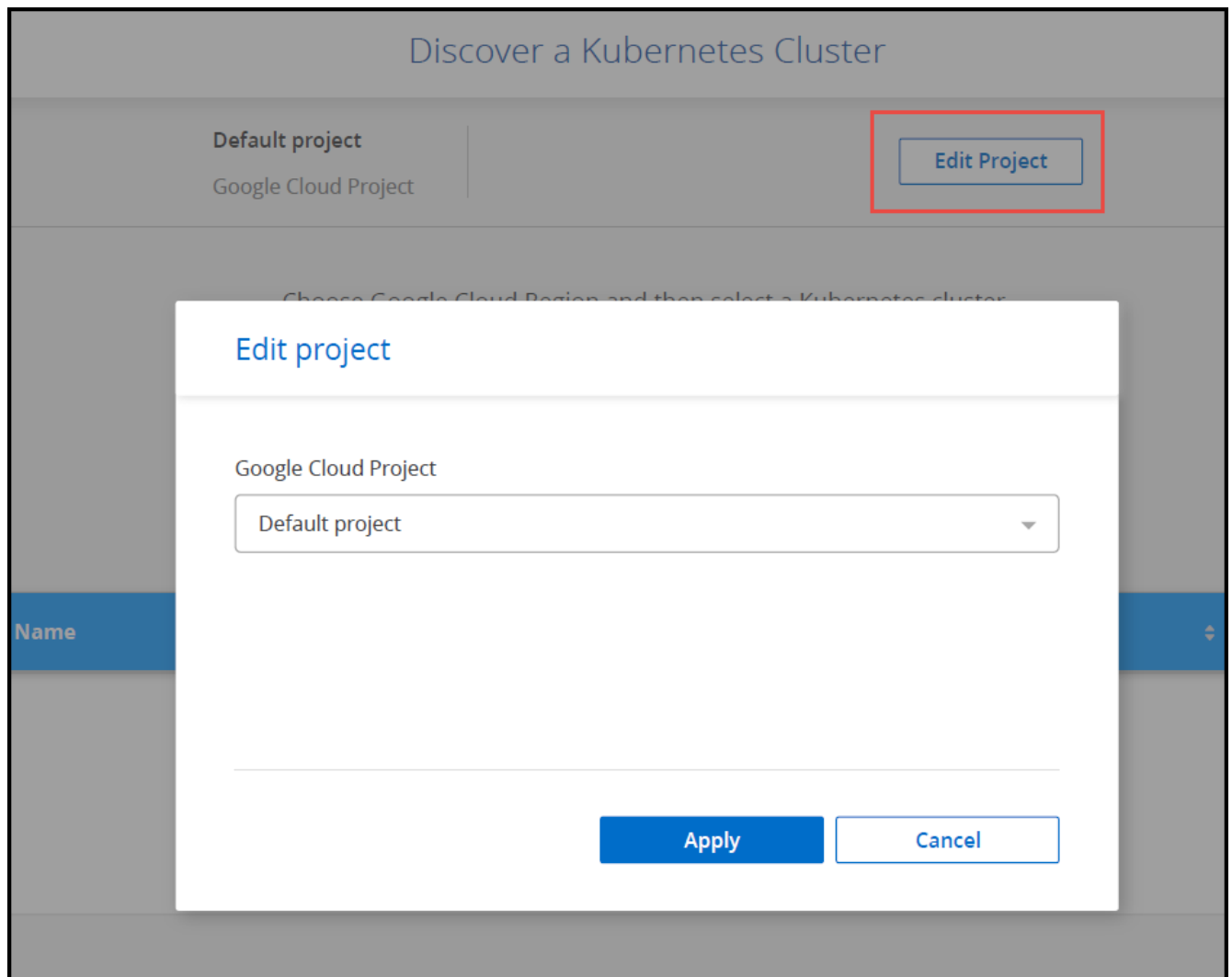
You can discover a fully-managed or self-managed Kubernetes cluster. Managed clusters must be discovered; they cannot be imported.

Steps

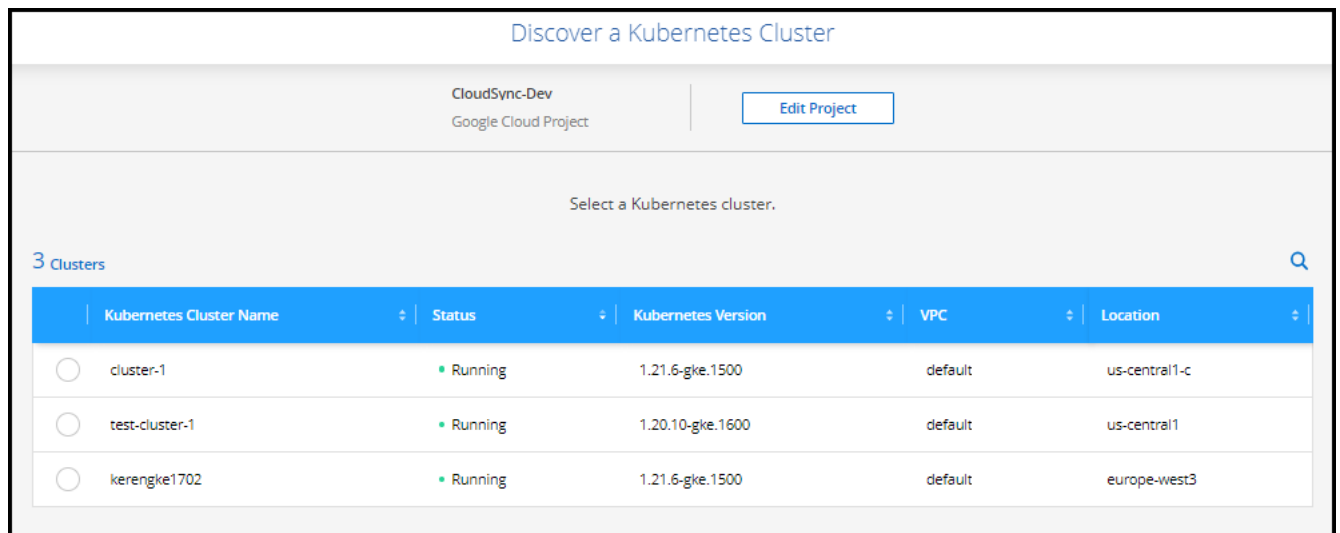
1. On the **Canvas**, click **Add Working Environment**.
2. Select **Google Cloud Platform > Kubernetes Cluster > Discover**.



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.

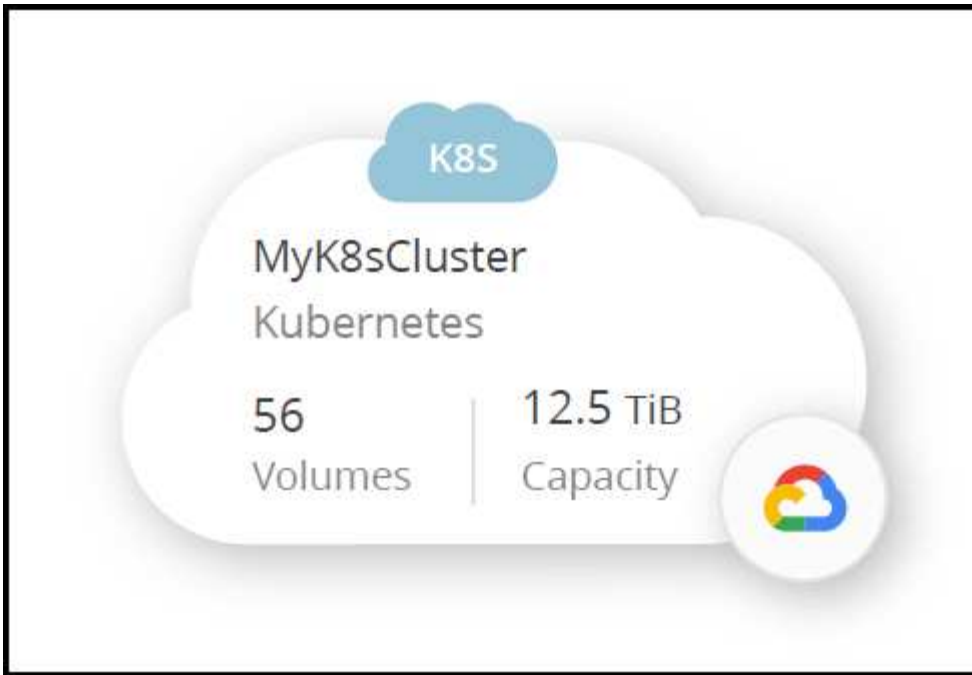


5. Select a Kubernetes cluster and click **Next**.



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.

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 **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 configuration file that's in YAML format and has the extension ".txt", ".kubeconfig", or ".config"

Kubernetes configuration file

KubConfig.txt

Upload

3 Kubernetes Clusters

	Kubernetes Cluster Name	Kubernetes Type	Kubernetes Version
<input checked="" type="radio"/>	Cluster_1	???	10.2.23.36
<input type="radio"/>	Cluster_2	???	10.2.23.36
<input type="radio"/>	Cluster_2	???	10.2.23.36

Result

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 Cluster

Upload a Kubernetes configuration file that's in YAML format

Kubernetes configuration file

minicubeconfig.txt Upload

1 Cluster


Kubernetes Cluster Name	Kubernetes Type	Kubernetes Version
test2	Self Managed	v1.24.0

5. Upload the cluster certificates.


Upload Cluster Certificates

To complete the import, upload the following cluster certificates. ⓘ


Certificate Authority



Client Key



Client Certificate



Result

BlueXP adds the Kubernetes cluster to the Canvas.

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.