



Manage apps

Astra Control Center

NetApp

November 15, 2021

Table of Contents

- Manage apps 1
 - Start managing apps 1
 - Define a custom app example 6

Manage apps

Start managing apps

After you [add a cluster to Astra Control management](#), you can install apps on the cluster (outside of Astra Control), and then go to the Apps page in Astra Control to start managing the apps and their resources.

Install apps on your cluster

Now that you've added your cluster to Astra Control, you can install apps or manage existing apps on the cluster. Any app that is scoped to a namespace can be managed. After the pods are online, you can manage the app with Astra Control.

For help with deploying validated apps from Helm charts, refer to the following:

- [Deploy MariaDB from a Helm chart](#)
- [Deploy MySQL from a Helm chart](#)
- [Deploy Postgres from a Helm chart](#)
- [Deploy Jenkins from a Helm chart](#)

Manage apps

Astra Control enables you to manage your apps at the namespace level or by Kubernetes label.



Apps deployed with Helm 2 are not supported.

You can perform the following activities to manage apps:

- Manage apps
 - [Manage apps by namespace](#)
 - [Manage apps by Kubernetes label](#)
- [Ignore apps](#)
- [Unmanage apps](#)



Astra Control itself is not a standard app; it is a "system app." You should not try to manage Astra Control itself. Astra Control itself isn't shown by default for management. To see system apps, use the "Show system apps" filter.

For instructions on how to manage apps using the Astra API, see the [Astra Automation and API information](#).



After a data protection operation (clone, backup, restore) and subsequent persistent volume resize, there is up to a twenty-minute delay before the new volume size is shown in the UI. The data protection operation is successful within minutes, and you can use the management software for the storage backend to confirm the change in volume size.

Manage apps by namespace

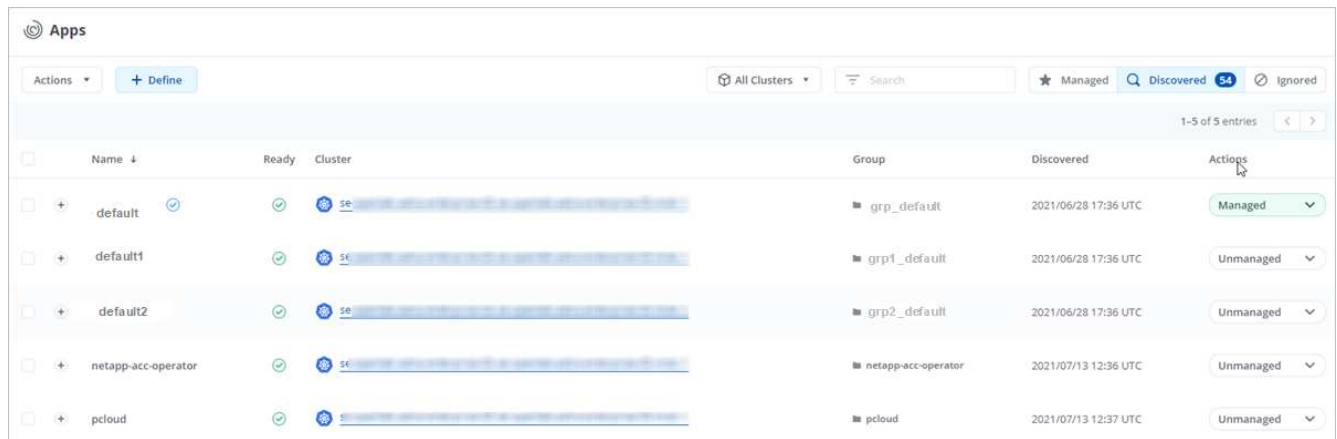
The **Discovered** section of the Apps page shows namespaces and any Helm-installed apps or custom-labeled apps in those namespaces. You can choose to manage each app individually or at the namespace level. It all comes down to the level of granularity that you need for data protection operations.

For example, you might want to set a backup policy for "maria" that has a weekly cadence, but you might need to back up "mariadb" (which is in the same namespace) more frequently than that. Based on those needs, you would need to manage the apps separately and not under a single namespace.

While Astra Control enables you to separately manage both levels of the hierarchy (the namespace and the apps in that namespace), the best practice is to choose one or the other. Actions that you take in Astra Control can fail if the actions take place at the same time at both the namespace and app level.

Steps

1. From the left navigation bar, select **Apps**.
2. Select **Discovered**.



The screenshot shows the 'Apps' page in Astra Control. At the top, there's a navigation bar with 'Actions' and '+ Define'. Below that, a filter bar shows 'All Clusters', a search bar, and tabs for 'Managed', 'Discovered' (selected), and 'Ignored'. The main table lists discovered namespaces and their apps. The columns are: Name, Ready, Cluster, Group, Discovered, and Actions. The 'Actions' column has a dropdown menu with 'Managed' and 'Unmanaged' options.

Name	Ready	Cluster	Group	Discovered	Actions
default	✓	se	grp_default	2021/06/28 17:36 UTC	Managed
default1	✓	se	grp1_default	2021/06/28 17:36 UTC	Unmanaged
default2	✓	se	grp2_default	2021/06/28 17:36 UTC	Unmanaged
netapp-acc-operator	✓	se	netapp-acc-operator	2021/07/13 12:36 UTC	Unmanaged
pcloud	✓	se	pcloud	2021/07/13 12:37 UTC	Unmanaged

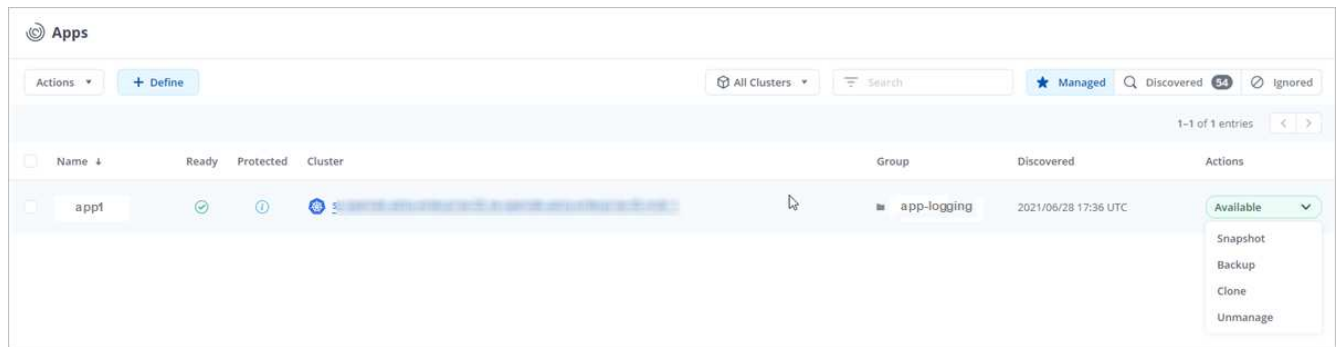
3. View the list of discovered namespaces. Expand the namespace to view the apps and associated resources.

Astra Control shows you the Helm apps and custom-labeled apps in the namespace. If Helm labels are available, they're designated with a tag icon.

4. Look at the **Group** column to see which namespace the application is running in (it's designated with the folder icon).
5. Decide whether you want to manage each app individually or at the namespace level.
6. Find the app you want at the desired level in the hierarchy, and from the Actions menu, select **Manage**.
7. If you don't want to manage an app, from the Actions menu next to the app, select **Ignore**.

For example, if you want to manage all apps under the "maria" namespace together so that they have the same snapshot and backup policies, you would manage the namespace and ignore the apps in the namespace.

8. To see the list of managed apps, select **Managed** as the display filter.



Notice the app you just added has a warning icon under the Protected column, indicating that it is not backed up and not scheduled for backups yet.

9. To see details of a particular app, select the app name.

Result

Apps that you chose to manage are now available from the **Managed** tab. Any ignored apps will move to the **Ignored** tab. Ideally, the Discovered tab will show zero apps, so that as new apps are installed, they are easier to find and manage.

Manage apps by Kubernetes label

Astra Control includes an action at the top of the Apps page named **Define custom app**. You can use this action to manage apps that are identified with a Kubernetes label. [Learn more about defining custom apps by Kubernetes label.](#)

Steps

1. From the left navigation bar, select **Apps**.
2. Select **Define**.

3. In the **Define custom application** dialog box, provide the required information to manage the app:
 - a. **New App:** Enter the display name of the app.
 - b. **Cluster:** Select the cluster where the app resides.
 - c. **Namespace:** Select the namespace for the app.
 - d. **Label:** Enter a label or select a label from the resources below.
 - e. **Selected Resources:** View and manage the selected Kubernetes resources that you'd like to protect (pods, secrets, persistent volumes, and more).
 - View the available labels by expanding a resource and clicking the number of labels.
 - Select one of the labels.

After you choose a label, it displays in the **Label** field. Astra Control also updates the **Unselected Resources** section to show the resources that don't match the selected label.

- f. **Unselected Resources:** Verify the app resources that you don't want to protect.
4. Click **Define custom application**.

Result

Astra Control enables management of the app. You can now find it in the **Managed** tab.

Ignore apps

If an app has been discovered, it appears in the Discovered list. In this case, you can clean up the Discovered list so that new apps that are newly installed are easier to find. Or, you might have apps that you are managing and later decide you no longer want to manage them. If you don't want to manage these apps, you can

indicate that they should be ignored.

Also, you might want to manage apps under one namespace together (Namespace-managed). You can ignore apps that you want to exclude from the namespace.

Steps

1. From the left navigation bar, select **Apps**.
2. Select **Discovered** as the filter.
3. Select the app.
4. From the Actions menu, select **Ignore**.
5. To unignore, from the Actions menu, select **Unignore**.

Unmanage apps

When you no longer want to back up, snapshot, or clone an app, you can stop managing it.



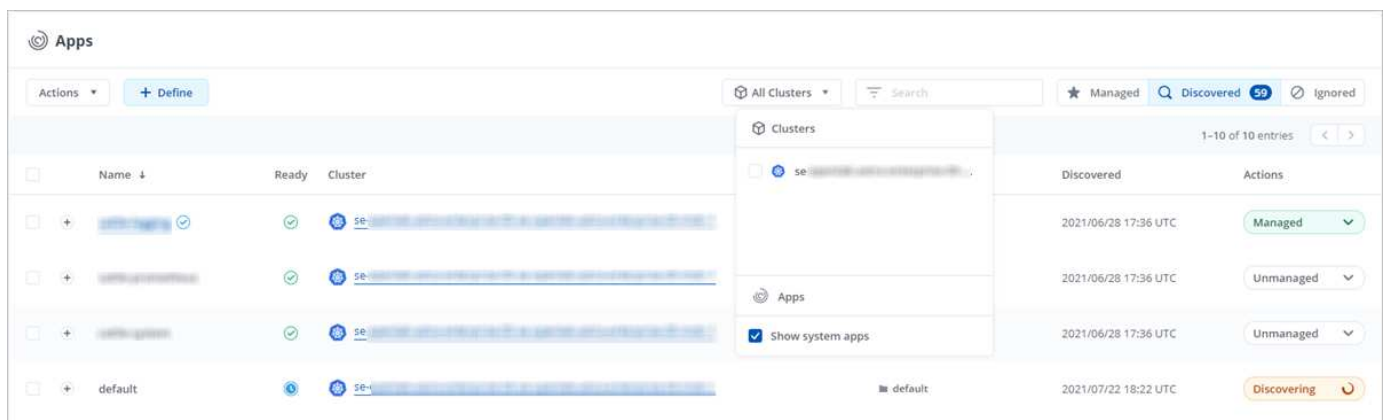
If you unmanage an app, any backups or snapshots that were created earlier will be lost.

Steps

1. From the left navigation bar, select **Apps**.
2. Select **Managed** as the filter.
3. Select the app.
4. From the Actions menu, select **Unmanage**.
5. Review the information.
6. Type "unmanage" to confirm.
7. Select **Yes, Unmanage Application**.

What about system apps?

Astra Control also discovers the system apps running on a Kubernetes cluster. You can display system apps by selecting the **Show system apps** checkbox under the Cluster filter in the toolbar.



We don't show you these system apps by default because it's rare that you'd need to back them up.



Astra Control itself is not a standard app; it is a "system app." You should not try to manage Astra Control itself. Astra Control itself isn't shown by default for management. To see system apps, use the "Show system apps" filter.

Find more information

- [Use the Astra API](#)

Define a custom app example

Creating a custom app lets you group elements of your Kubernetes cluster into a single app.

A custom app gives you more granular control over what to include in an Astra Control operation, including:

- Clone
- Snapshot
- Backup
- Protection Policy

In most cases you will want to use Astra Control's features on your entire app. However, you can also create a custom app to use these features by the labels you assign to Kubernetes objects in a namespace.

To create a custom app, go to the Apps page and click **+ Define**.

As you make your selections, the Custom App window shows you which resources will be included or excluded from your custom app. This helps you make sure you are choosing the correct criteria for defining your custom app.



Custom apps can be created only within a specified namespace on a single cluster. Astra Control does not support the ability for a custom app to span multiple namespaces or clusters.

A label is a key/value pair you can assign to Kubernetes objects for identification. Labels make it easier to sort, organize, and find your Kubernetes objects. To learn more about Kubernetes labels, [see the official Kubernetes documentation](#).



Overlapping policies for the same resource under different names can cause data conflicts. If you create a custom app for a resource, be sure it's not being cloned or backed up under any other policies.

Example: Separate Protection Policy for canary release

In this example, the devops team is managing a canary release deployment. Their cluster has three pods running NginX. Two of the pods are dedicated to the stable release. The third pod is for the canary release.

The devops team's Kubernetes admin adds the label `deployment=stable` to the stable release pods. The team adds the label `deployment=canary` to the canary release pod.

The team's stable release includes a requirement for hourly snapshots and daily backups. The canary release is more ephemeral, so they want to create a less aggressive, short-term Protection Policy for anything labeled

deployment=canary.

In order to avoid possible data conflicts, the admin will create two custom apps: one for the canary release, and one for the stable release. This keeps the backups, snapshots, and clone operations separate for the two groups of Kubernetes objects.

Steps

1. After the team adds the cluster to Astra Control, the next step is to define a custom app. To do this, the team clicks the **+ Define** button on the Apps page.
2. In the pop-up window which appears, the team sets `devops-canary-deployment` as the app name. The team chooses the cluster in the **Cluster** drop-down, then the app's namespace from the **Namespace** drop-down.
3. The team can either type `deployment=canary` in the **Labels** field, or select that label from the resources listed below.
4. After defining the custom app for the canary deployment, the team repeats the process for the stable deployment.

When the team has finished creating the two custom apps, they can treat these resources as any other Astra Control application. They can clone them, create backups and snapshots, and create a custom Protection Policy for each group of resources based on the Kubernetes labels.

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.