



Protect apps with snapshots and backups

Astra

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Protect apps with snapshots and backups

Protect your apps by taking snapshots and backups using an automated protection policy or on an ad-hoc basis.

Snapshots and backups

A *snapshot* is a point-in-time copy of an app that's stored on the same provisioned volume as the app. They are usually fast. Local snapshots are used to restore the application to an earlier point in time.

A *backup* is stored on object storage in the cloud. A backup can be slower to take compared to the local snapshots. But they can be accessed across regions in the cloud to enable app migrations. You can also choose a longer retention period for backups.



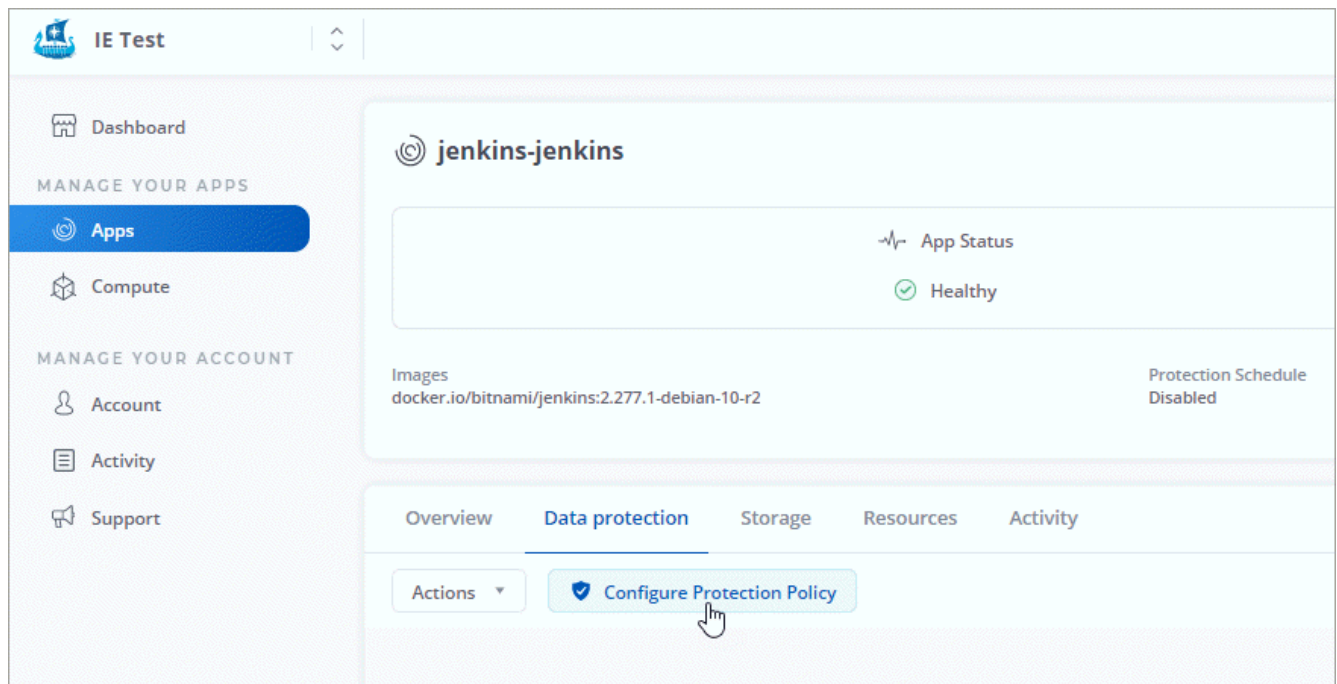
You can't be fully protected until you have a recent backup. This is important because backups are stored in an object store away from the persistent volumes. If a failure or accident wipes out the cluster and its persistent storage, then you need a backup to recover. A snapshot wouldn't enable you to recover.

Configure a protection policy

A protection policy protects an app by creating snapshots, backups, or both at a defined schedule. You can choose to create snapshots and backups hourly, daily, weekly, and monthly, and you can specify the number of copies to retain.

Steps

1. Click **Apps** and then click the name of a managed app.
2. Click **Data Protection**.
3. Click **Configure Protection Policy**.



4. Define a protection schedule by choosing the number of snapshots and backups to keep for the hourly, daily, weekly, and monthly schedules.

You can define the hourly, daily, weekly, and monthly schedules concurrently. A schedule won't turn active until you set a retention level for snapshots and backups.

When you set a retention level for backups, you can choose the bucket where you'd like to store the backups.

The following example sets four protection schedules: hourly, daily, weekly, and monthly for snapshots and backups.

Configure protection policy STEP 1/2: DETAILS

PROTECTION SCHEDULE

- Hourly**: Every hour on the 0th minute, keep the last 4 snapshots
- Daily**: Daily at 05:00 (UTC), keep the last 7 snapshots
- Weekly**: Weekly on Mondays at 05:00 (UTC), keep the last 12 snapshots
- Monthly**: Every 1st of the month at 05:00 (UTC), keep the last 12 backups

● Hourly ● Daily ● Weekly ● **Monthly**

Day(s) of Month (optional): 1 x Time (UTC) (optional): 05:00

Snapshots to keep: 0 Backups to keep: 12

BACKUP DESTINATION

Bucket: ben-astra-bucket Default

OVERVIEW

Schedule and retention

Define a policy to continuously protect your application on a schedule and configure a retention count to get started.

For select stateful applications, expect I/O to pause for a short time during a backup or snapshot operation.

Read more in [Protection policies](#).

Application maria

Namespace maria

Cluster david-ie-00

Cancel Review →

5. Click **Review**.
6. Click **Configure**.

Here's a video that shows each of these steps.

► <https://docs.netapp.com/us-en/astra/media/use/video-set-protection-policy.mp4> (video)

Result

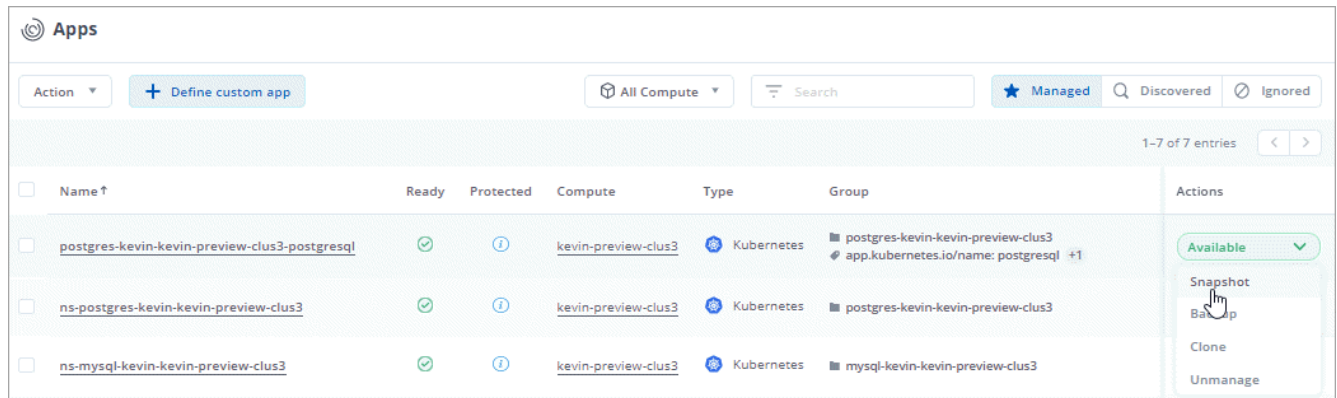
Astra Control implements the data protection policy by creating and retaining snapshots and backups using the schedule and retention policy that you defined.

Create a snapshot

You can create an on-demand snapshot at any time.

Steps

1. Click **Apps**.
2. Click the drop-down list in the **Actions** column for the desired app.
3. Click **Snapshot**.



4. Customize the name of the snapshot and then click **Review Information**.
5. Review the snapshot summary and click **Snapshot App**.

Result

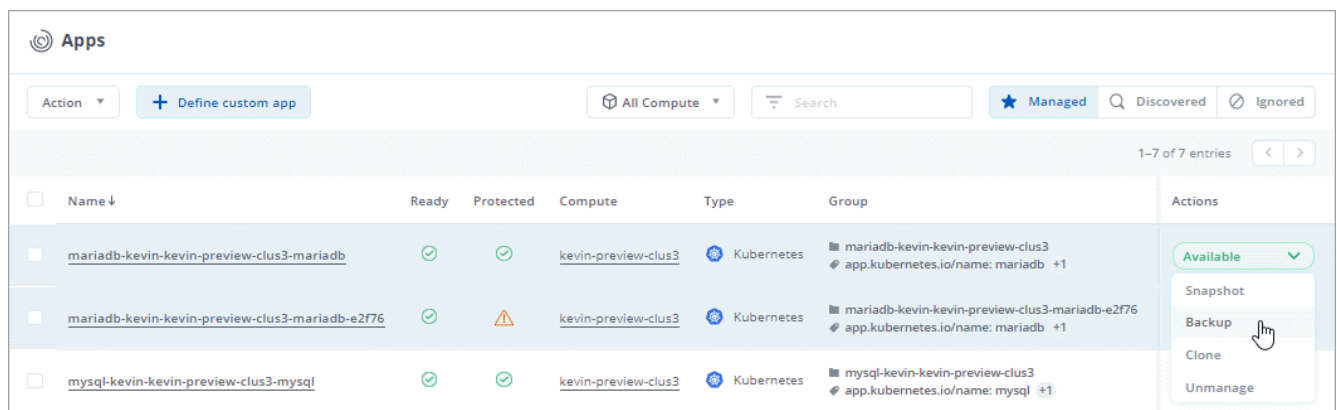
Astra Control creates a snapshot of the apps.

Create a backup

You can also back up an app at any time.

Steps

1. Click **Apps**.
2. Click the drop-down list in the **Actions** column for the desired app.
3. Click **Backup**.



4. Customize the name of the backup, choose whether to back up the app from an existing snapshot, and then click **Review Information**.
5. Review the backup summary and click **Backup App**.

Result

Astra Control creates a backup of the app.

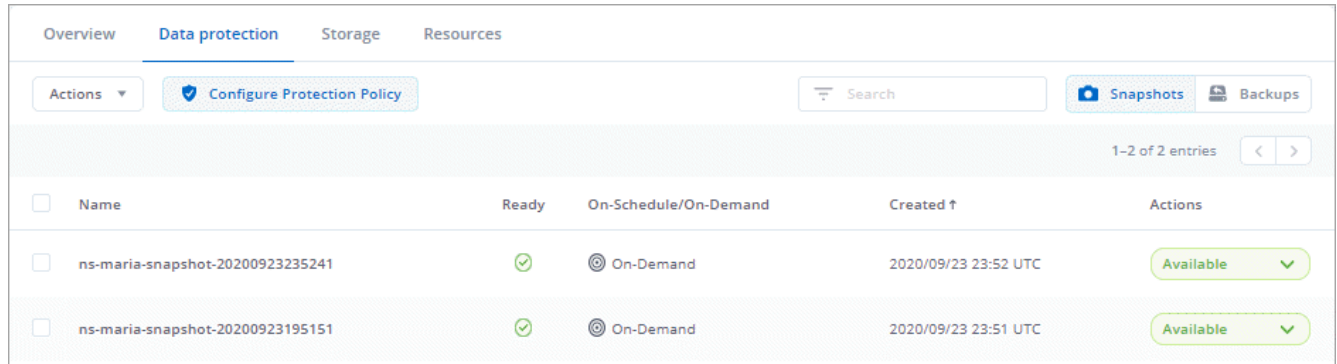
View snapshots and backups

You can view the snapshots and backups of an app from the Data Protection tab.

Steps

1. Click **Apps** and then click the name of a managed app.
2. Click **Data Protection**.

The snapshots display by default.



The screenshot shows the 'Data protection' tab in a web interface. At the top, there are tabs for 'Overview', 'Data protection' (selected), 'Storage', and 'Resources'. Below these are buttons for 'Actions' (with a dropdown arrow) and 'Configure Protection Policy'. A search bar is also present. On the right, there are buttons for 'Snapshots' and 'Backups'. The main content area shows a table with 2 entries. The table has columns: 'Name', 'Ready', 'On-Schedule/On-Demand', 'Created ↑', and 'Actions'. The first entry is 'ns-maria-snapshot-20200923235241' with a 'Ready' status of '✓', 'On-Schedule/On-Demand' of 'On-Demand', and 'Created' time of '2020/09/23 23:52 UTC'. The second entry is 'ns-maria-snapshot-20200923195151' with a 'Ready' status of '✓', 'On-Schedule/On-Demand' of 'On-Demand', and 'Created' time of '2020/09/23 23:51 UTC'. Both entries have an 'Available' status in the 'Actions' column.

<input type="checkbox"/>	Name	Ready	On-Schedule/On-Demand	Created ↑	Actions
<input type="checkbox"/>	ns-maria-snapshot-20200923235241	✓	⌚ On-Demand	2020/09/23 23:52 UTC	Available ✓
<input type="checkbox"/>	ns-maria-snapshot-20200923195151	✓	⌚ On-Demand	2020/09/23 23:51 UTC	Available ✓

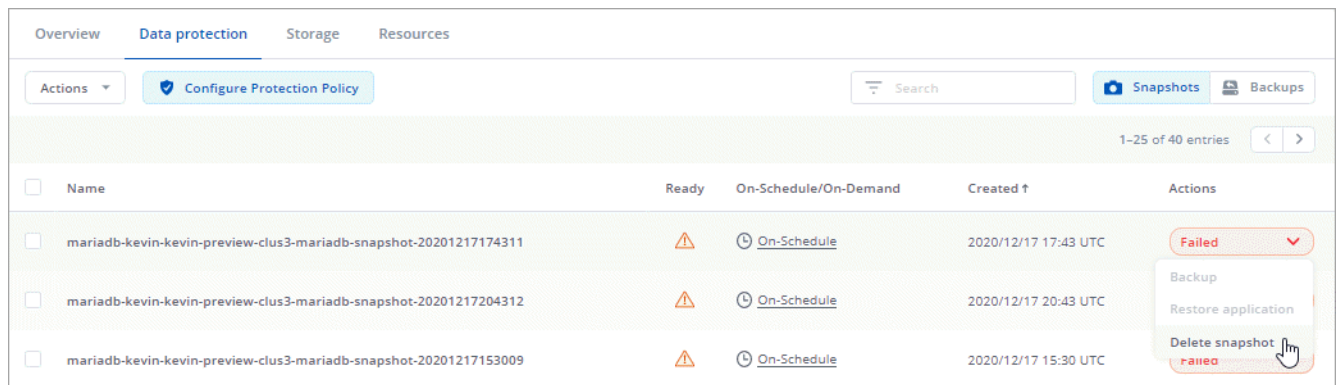
3. Click **Backups** to see the list of backups.

Delete snapshots

Delete the scheduled or on-demand snapshots that you no longer need.

Steps

1. Click **Apps** and then click the name of a managed app.
2. Click **Data Protection**.
3. Click the drop-down list in the **Actions** column for the desired snapshot.
4. Click **Delete snapshot**.



The screenshot shows the 'Data protection' tab in a web interface. At the top, there are tabs for 'Overview', 'Data protection' (selected), 'Storage', and 'Resources'. Below these are buttons for 'Actions' (with a dropdown arrow) and 'Configure Protection Policy'. A search bar is also present. On the right, there are buttons for 'Snapshots' and 'Backups'. The main content area shows a table with 3 entries. The table has columns: 'Name', 'Ready', 'On-Schedule/On-Demand', 'Created ↑', and 'Actions'. The first entry is 'mariadb-kevin-kevin-preview-clus3-mariadb-snapshot-20201217174311' with a 'Ready' status of '⚠️', 'On-Schedule/On-Demand' of 'On-Schedule', and 'Created' time of '2020/12/17 17:43 UTC'. The second entry is 'mariadb-kevin-kevin-preview-clus3-mariadb-snapshot-20201217204312' with a 'Ready' status of '⚠️', 'On-Schedule/On-Demand' of 'On-Schedule', and 'Created' time of '2020/12/17 20:43 UTC'. The third entry is 'mariadb-kevin-kevin-preview-clus3-mariadb-snapshot-20201217153009' with a 'Ready' status of '⚠️', 'On-Schedule/On-Demand' of 'On-Schedule', and 'Created' time of '2020/12/17 15:30 UTC'. The first entry has a dropdown menu open in the 'Actions' column, showing options: 'Backup', 'Restore application', and 'Delete snapshot' (which is highlighted by a mouse cursor). The 'Delete snapshot' option has a red 'Failed' status next to it.

<input type="checkbox"/>	Name	Ready	On-Schedule/On-Demand	Created ↑	Actions
<input type="checkbox"/>	mariadb-kevin-kevin-preview-clus3-mariadb-snapshot-20201217174311	⚠️	⌚ On-Schedule	2020/12/17 17:43 UTC	Failed ✓ Backup Restore application Delete snapshot (Failed)
<input type="checkbox"/>	mariadb-kevin-kevin-preview-clus3-mariadb-snapshot-20201217204312	⚠️	⌚ On-Schedule	2020/12/17 20:43 UTC	
<input type="checkbox"/>	mariadb-kevin-kevin-preview-clus3-mariadb-snapshot-20201217153009	⚠️	⌚ On-Schedule	2020/12/17 15:30 UTC	

5. Type the name of the snapshot to confirm deletion and then click **Yes, Delete snapshot**.

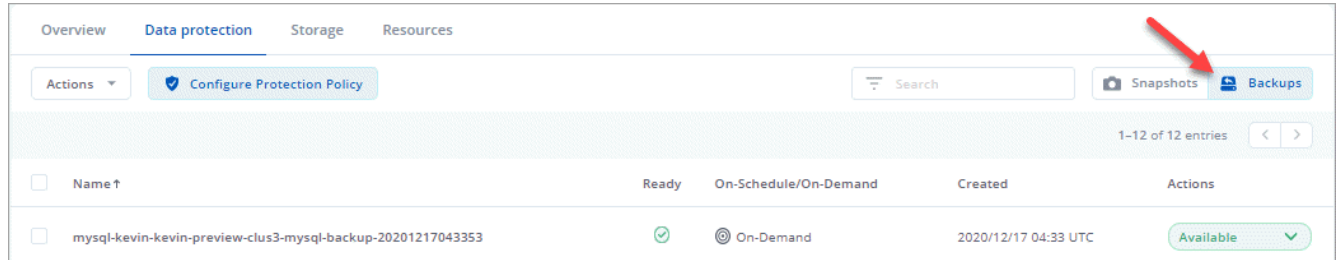
Result

Astra Control deletes the snapshot.

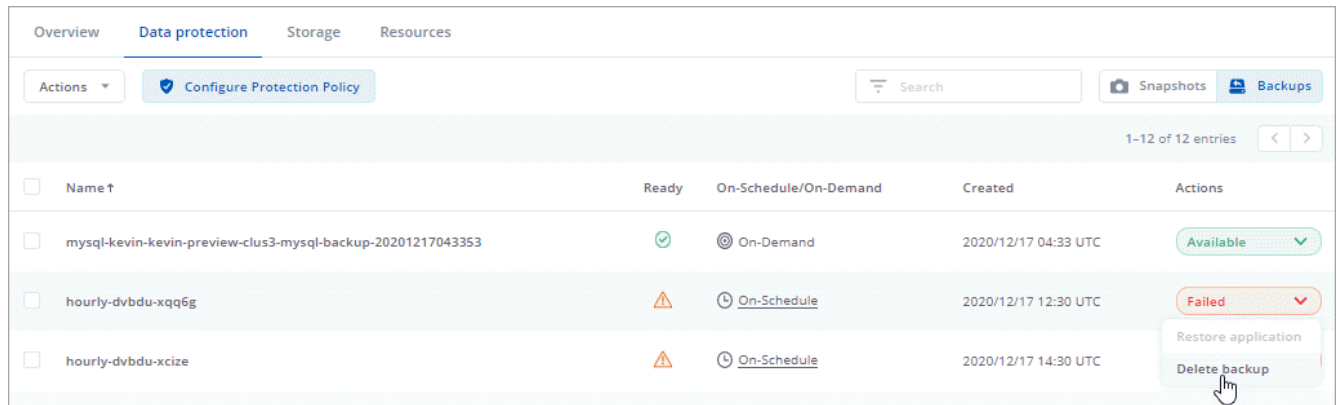
Delete backups

Delete the scheduled or on-demand backups that you no longer need.

1. Click **Apps** and then click the name of a managed app.
2. Click **Data Protection**.
3. Click **Backups**.



4. Click the drop-down list in the **Actions** column for the desired backup.
5. Click **Delete backup**.



6. Type the name of the backup to confirm deletion and then click **Yes, Delete backup**.

Result

Astra Control deletes the backup.

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