



## **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.



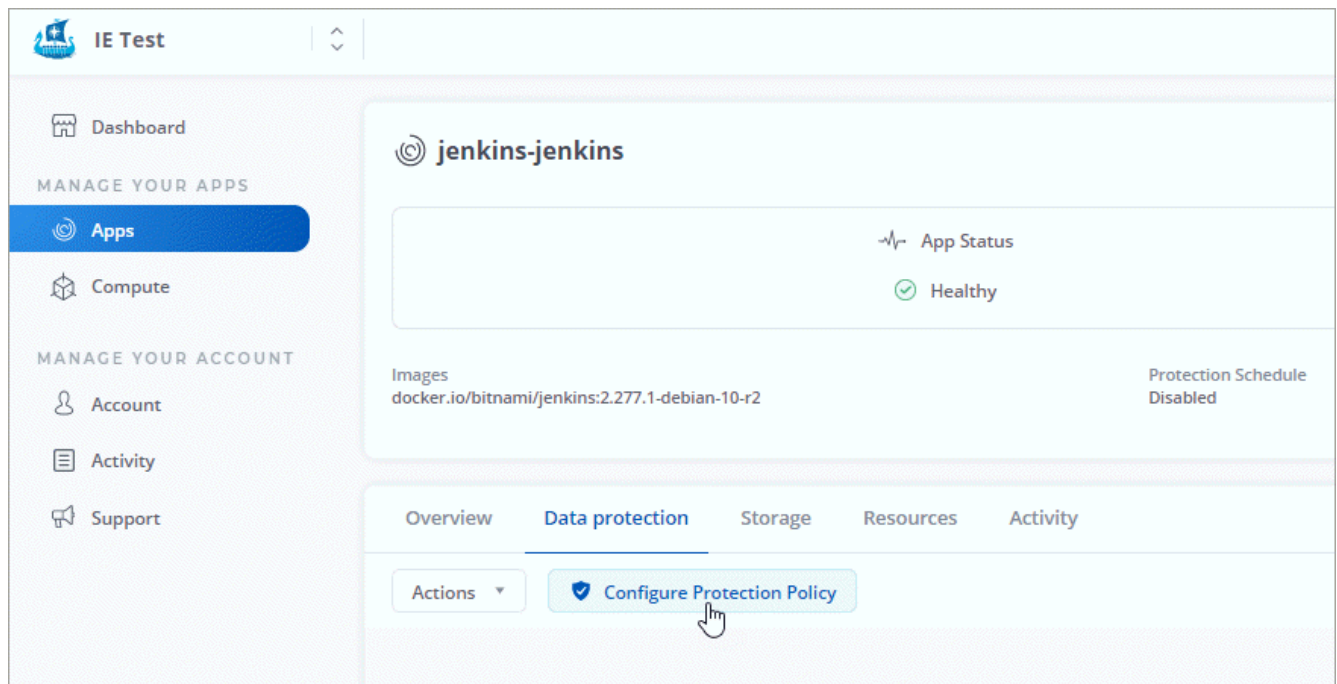
*You can't be fully protected until you have a recent backup.* This is important because backups are stored in an object store away from the persistent volumes. If a failure or accident wipes out the cluster and its persistent storage, then you need a backup to recover. A snapshot wouldn't enable you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

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

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 02:00 (UTC), keep the last 15 snapshots
- Weekly**: Weekly on Mondays at 02:00 (UTC), keep the last 26 snapshots
- Monthly**: Every 1st of the month at 02:00 (UTC), keep the last 12 backups

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

Day(s) of Month: 1 X Time (UTC): 02:00 Snapshots to keep: 0 Backups to keep: 12

**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 IO to pause for a short period of time during a backup or snapshot operation.

Read more in [Protection Policies](#).

Application: jenkins-jenkins  
Namespace: jenkins  
Labels: app.kubernetes.io/name: jenkins, app.kubernetes.io/instance: jenkins  
Compute: ben-cluster

Cancel Review Information →

5. Click **Review Information**.
6. Click **Set Protection Policy**.

## Result

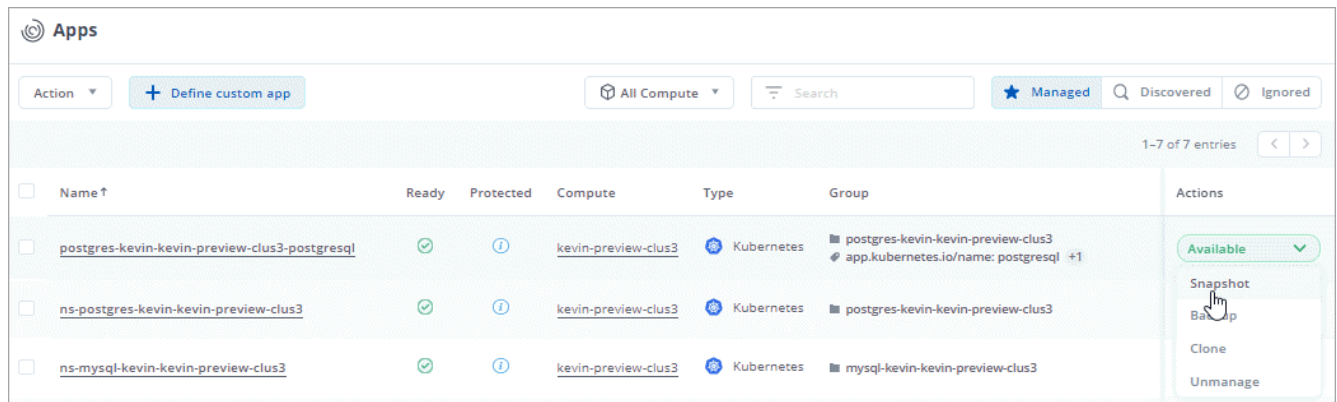
Astra implements the data protection policy by creating and retaining snapshots and backups using the schedule and retention policy that you defined.

## 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

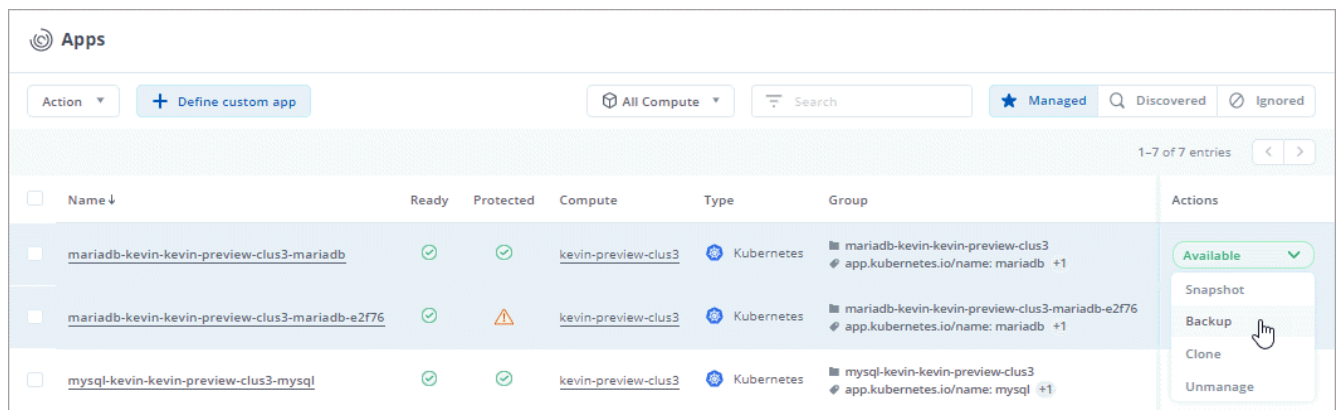
Astra creates a snapshot of the apps.

# 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 creates a backup of the app.

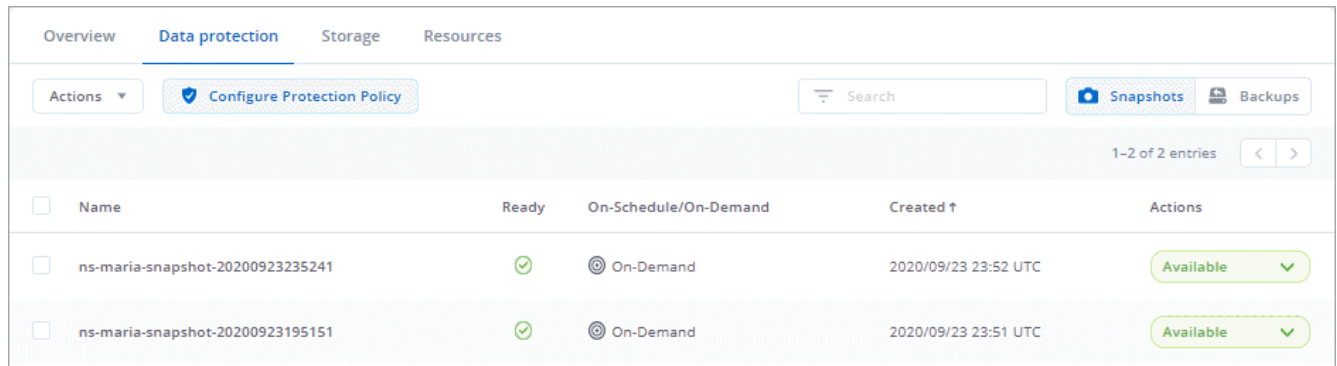
# View snapshots and backups

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 management console. It features a table with columns: Name, Ready, On-Schedule/On-Demand, Created ↑, and Actions. Two snapshots are listed, both with a 'Ready' status and 'On-Demand' schedule. The 'Actions' column for each snapshot has a green 'Available' button with a dropdown arrow.

Name	Ready	On-Schedule/On-Demand	Created ↑	Actions
ns-maria-snapshot-20200923235241	✓	⌚ On-Demand	2020/09/23 23:52 UTC	Available ▼
ns-maria-snapshot-20200923195151	✓	⌚ On-Demand	2020/09/23 23:51 UTC	Available ▼

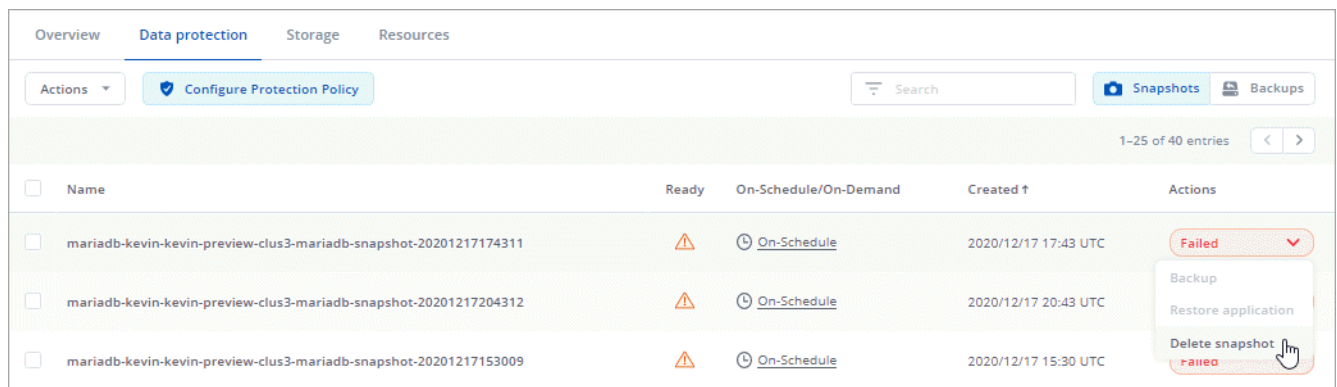
3. Click **Backups** to see the list of backups.

## 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 with a table of snapshots. The 'Actions' column for the first snapshot has a red 'Failed' button with a dropdown arrow. The dropdown menu is open, showing options: 'Backup', 'Restore application', and 'Delete snapshot' (which is highlighted with a mouse cursor). The 'Delete snapshot' option has a red 'Failed' status indicator.

Name	Ready	On-Schedule/On-Demand	Created ↑	Actions
mariadb-kevin-kevin-preview-clus3-mariadb-snapshot-20201217174311	⚠	⌚ On-Schedule	2020/12/17 17:43 UTC	Failed ▼ Backup Restore application Delete snapshot (Failed)
mariadb-kevin-kevin-preview-clus3-mariadb-snapshot-20201217204312	⚠	⌚ On-Schedule	2020/12/17 20:43 UTC	
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**.

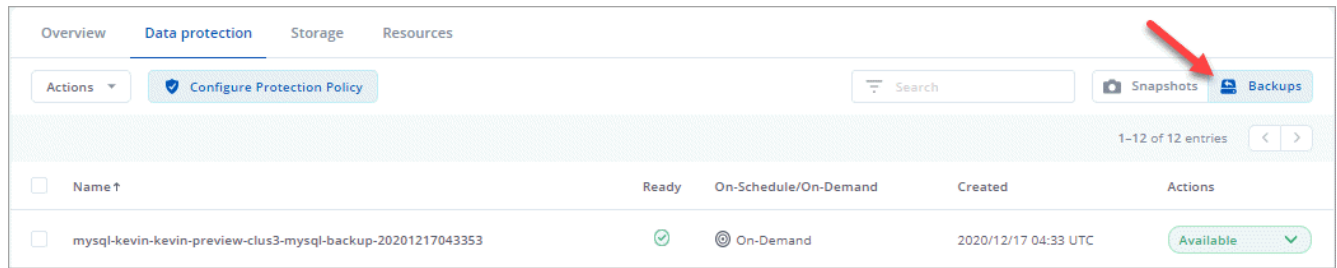
### Result

Astra deletes the snapshot.

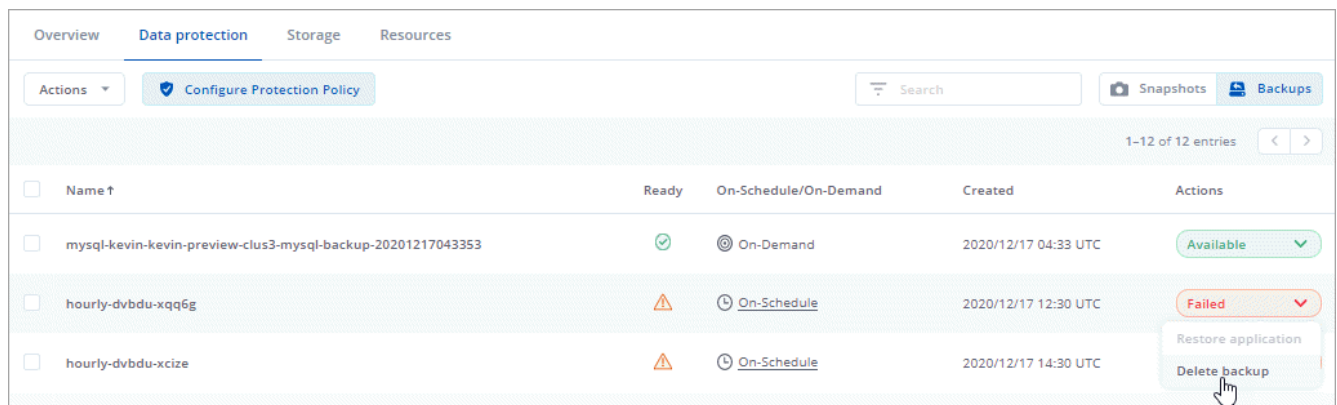
## Delete backups

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 deletes the backup.

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