



# App protection

## Astra Automation

NetApp  
February 12, 2024

# Table of Contents

- App protection ..... 1
  - List the snapshots ..... 1
  - List the backups ..... 2
  - Create a snapshot for an app ..... 4
  - Create a backup for an app ..... 5
  - Delete a snapshot ..... 6
  - Delete a backup ..... 6
  - Create a data protection policy ..... 7

# App protection

## List the snapshots

You can list the snapshots that have been taken for a specific application.

### Before you begin

You must have the ID of the app you want to list the snapshots for. If needed you can use the workflow [List the apps](#) to locate the application.

### 1. List the snapshots

Perform the following REST API call to list the snapshots.

HTTP method	Path
GET	/accounts/{account_id}/k8s/v1/apps/{app_id}/appSnaps

### Additional input parameters

In addition to the parameters common with all REST API calls, the following parameters are also used in the curl examples for this step.

Parameter	Type	Required	Description
app id	Path	Yes	Identifies the application owning the listed snapshots.
count	Query	No	If <code>count=true</code> the number of snapshots is included in the metadata section of the response.

### Curl example: Return all snapshots for the app

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v1/apps/<APP_ID>/appSnaps' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

### Curl example: Return all snapshots for the app and the count

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v1/apps/<APP_ID>/appSnaps?count=true' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

### JSON output example

```

{
  "items": [
    {
      "type": "application/astra-appSnap",
      "version": "1.1",
      "id": "1ce34da4-bb0a-4926-b925-4a5d85dda8c2",
      "hookState": "success",
      "metadata": {
        "createdBy": "a530e865-23e8-4e2e-8020-e92c419a3867",
        "creationTimestamp": "2022-10-30T22:44:20Z",
        "modificationTimestamp": "2022-10-30T22:44:20Z",
        "labels": []
      },
      "snapshotAppAsset": "0ebfe3f8-40ed-4bdc-88c4-2144fbda85a0",
      "snapshotCreationTimestamp": "2022-10-30T22:44:33Z",
      "name": "snapshot-david-1",
      "state": "completed",
      "stateUnready": []
    }
  ],
  "metadata": {}
}

```

## List the backups

You can list the backups that have been created for a specific application.

### Before you begin

You must have the ID of the app you want to list the backups for. If needed you can use the workflow [List the apps](#) to locate the application.

### 1. List the backups

Perform the following REST API call.

HTTP method	Path
GET	/accounts/{account_id}/k8s/v1/apps/{app_id}/appBackups

### Additional input parameters

In addition to the parameters common with all REST API calls, the following parameters are also used in the curl examples for this step.

Parameter	Type	Required	Description
app id	Path	Yes	Identifies the managed application owning the listed backups.

### Curl example: Return all backups for the app

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v1/apps/<APP_ID>/appBackups' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

### JSON output example

```
{
  "items": [
    {
      "type": "application/astra-appBackup",
      "version": "1.1",
      "id": "8edeb4a4-fd8b-4222-a559-1013145b28fc",
      "name": "backup-david-oct28-1",
      "bucketID": "a443e58f-59bd-4d45-835a-1bc7813f659a",
      "snapshotID": "dfe237cb-57b7-4576-af4d-00ba3a8f2828",
      "state": "completed",
      "stateUnready": [],
      "hookState": "success",
      "totalBytes": 205219132,
      "bytesDone": 205219132,
      "percentDone": 100,
      "metadata": {
        "labels": [
          {
            "name": "astra.netapp.io/labels/read-only/triggerType",
            "value": "backup"
          }
        ],
        "creationTimestamp": "2022-10-28T21:58:37Z",
        "modificationTimestamp": "2022-10-28T21:58:55Z",
        "createdBy": "a530e865-23e8-4e2e-8020-e92c419a3867"
      }
    }
  ],
  "metadata": {}
}
```

# Create a snapshot for an app

You can create a snapshot for a specific application.

## Before you begin

You must have the ID of the app you want to create a snapshot for. If needed you can use the workflow [List the apps](#) to locate the application.

## 1. Create a snapshot

Perform the following REST API call.

HTTP method	Path
POST	/accounts/{account_id}/k8s/v1/apps/{app_id}/appSnaps

## Additional input parameters

In addition to the parameters common with all REST API calls, the following parameters are also used in the curl examples for this step.

Parameter	Type	Required	Description
app id	Path	Yes	Identifies the managed application where the snapshot will be created.
JSON	Body	Yes	Provides the parameters for the snapshot. See the example below.

## JSON input example

```
{
  "type": "application/astra-appSnap",
  "version": "1.1",
  "name": "snapshot-david-1"
}
```

## Curl example: Create a snapshot for the app

```
curl --location -i --request POST
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v1/apps/<APP_ID>/appSnaps' --header 'Content-Type: application/astra-appSnap+json' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>' --data @JSONinput
```

# Create a backup for an app

You can create a backup for a specific application and then use the backup to restore or clone the app.

## Before you begin

You must have the ID of the app you want to back up. If needed you can use the workflow [List the apps](#) to locate the application.

## 1. Create a backup

Perform the following REST API call.

HTTP method	Path
POST	/accounts/{account_id}/k8s/v1/apps/{app_id}/appBackups

## Additional input parameters

In addition to the parameters common with all REST API calls, the following parameters are also used in the curl examples for this step.

Parameter	Type	Required	Description
app id	Path	Yes	Identifies the application where the backup will be created.
JSON	Body	Yes	Provides the parameters for the backup. See the example below.

## JSON input example

```
{
  "type": "application/astra-appBackup",
  "version": "1.1",
  "name": "backup-david-1"
}
```

## Curl example: Create a backup for the app

```
curl --location -i --request POST
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v1/apps/<APP_ID>/appBackups' --header 'Content-Type: application/astra-appBackup+json' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>' --data @JSONinput
```

# Delete a snapshot

You can delete a snapshot associated with an application.

## Before you begin

You must have the following:

- ID of the app that owns the snapshot. If needed you can use the workflow [List the apps](#) to locate the application.
- ID of the snapshot you want to delete. If needed you can use the workflow [List the snapshots](#) to locate the snapshot.

## 1. Delete the snapshot

Perform the following REST API call.

HTTP method	Path
DELETE	/accounts/{account_id}/k8s/v1/apps/{app_id}/appSnaps/{appSnap_id}

## Additional input parameters

In addition to the parameters common with all REST API calls, the following parameters are also used in the curl examples for this step.

Parameter	Type	Required	Description
app id	Path	Yes	Identifies the managed application owning the snapshot.
snapshot id	Path	Yes	Identifies the snapshot to be deleted.

## Curl example: Delete a single snapshot for the app

```
curl --location -i --request DELETE
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v1/apps/<APP_ID>/appSnaps/<SNAPSHOT_ID>' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

# Delete a backup

You can delete a backup associated with an application.

## Before you begin

You must have the following:

- ID of the app that owns the backup. If needed you can use the workflow [List the apps](#) to locate the application.
- ID of the backup you want to delete. If needed you can use the workflow [List the backups](#) to locate the



snapshot.

## 1. Delete the backup

Perform the following REST API call.



You can force the deletion of a failed backup using the optional request header as described below.

HTTP method	Path
DELETE	/accounts/{account_id}/k8s/v1/apps/{app_id}/appBackups/{appBackup_id}

### Additional input parameters

In addition to the parameters common with all REST API calls, the following parameters are also used in the curl examples for this step.

Parameter	Type	Required	Description
app id	Path	Yes	Identifies the managed application owning the backup.
backup id	Path	Yes	Identifies the backup to be deleted.
force delete	Header	No	Used to force the deletion of a failed backup.

### Curl example: Delete a single backup for the app

```
curl --location -i --request DELETE
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v1/apps/<APP_ID>/appBackups/<BACKUP_ID>' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

### Curl example: Delete a single backup for the app with the force option

```
curl --location -i --request DELETE
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v1/apps/<APP_ID>/appBackups/<BACKUP_ID>' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>' --header 'Force-Delete: true'
```

## Create a data protection policy

You can create a data protection policy based on one or more schedules.

### 1. Select the app

Perform the workflow [List the apps](#) and select the desired application.

## 2. Create the protection

Perform the following REST API call to create a protection policy for a specific app.

HTTP method	Path
POST	/accounts/{account_id}/k8s/v1/apps/{app_id}/schedules

### JSON input example

```
{
  "type": "application/astra-schedule",
  "version": "1.3",
  "name": "Backup Schedule",
  "enabled": "true",
  "granularity": "monthly",
  "minute": "0",
  "hour": "0",
  "dayOfMonth": "1",
  "snapshotRetention": "12",
  "backupRetention": "12"
}
```

### Curl example

```
curl --location -i --request POST
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v1/apps/<APP_ID>/schedules' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
--data @JSONinput
```

## 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.