



# Infrastructure workflows

## Astra Automation

NetApp  
September 13, 2021

This PDF was generated from [https://docs.netapp.com/us-en/astra-automation/workflows\\_infra/workflows\\_infra\\_before.html](https://docs.netapp.com/us-en/astra-automation/workflows_infra/workflows_infra_before.html) on September 13, 2021. Always check docs.netapp.com for the latest.

# Table of Contents

- Infrastructure workflows ..... 1
  - Before you begin ..... 1
  - Identity and access ..... 1
  - Buckets..... 2
  - Storage..... 3
  - Clusters ..... 4

# Infrastructure workflows

## Before you begin

You can use these workflows to create and maintain the infrastructure used with the Astra Control Center deployment model. In most case, the workflows can also be used with Astra Control Service.



These workflows can be expanded and enhanced by NetApp at any time and so you should review them periodically.

## General preparation

Before using any of the Astra workflows, make sure to review [Prepare to use the workflows](#).

## Workflow categories

The infrastructure workflows are organized in different categories to make it easier to locate the one you want.

Category	Description
Identity and access	These workflows allow you to manage identity and how Astra is accessed. The resources include users, credentials, and tokens.
Buckets	You can use these workflows to create and manage the S3 buckets used to store backups.
Storage	These workflows allow you to add and maintain storage backends and volumes.
Clusters	You can add managed Kubernetes clusters which allows you to protect and support the applications they contain.

## Identity and access

### List users

You can list the applications that are defined for a specific Astra account.

#### 1. List the users

Perform the following REST API call.

HTTP method	Path
GET	/account/{accountID}/core/v1/users

### 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
include	Query	No	Optionally select the values you want returned in the response.

#### Curl example: Return all data for all users

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

#### Curl example: Return the first name, last name, and id for all users

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/core/v1/users?include=first
Name,lastName,id' --header 'Accept: */*' --header 'Authorization: Bearer
<API_TOKEN>'
```

#### JSON output example

```
{
  "items": [
    [
      "David",
      "Peterson",
      "844ec6234-11e0-49ea-8434-a992a6270ec1"
    ],
    [
      "Scott",
      "Morris",
      "2a3e227c-fda7-4145-a86c-ed9aa0183a6c"
    ]
  ],
  "metadata": {}
}
```

## Buckets

### List buckets

You can list the S3 buckets defined for a specific Astra account.

### 1. List the buckets

Perform the following REST API call.

HTTP method	Path
GET	/account/{accountID}/topology/v1/buckets

#### Curl example: Return all data for all buckets

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

## Storage

### List storage backends

You can list the available storage backends.

### 1. List the buckets

Perform the following REST API call.

HTTP method	Path
GET	/account/{accountID}/topology/v1/storageBackends

#### Curl example: Return all data for all storage backends

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

### JSON output example

```

{
  "items": [
    {
      "backendCredentialsName": "10.191.77.177",
      "backendName": "myinchunhcluster-1",
      "backendType": "ONTAP",
      "backendVersion": "9.8.0",
      "configVersion": "Not applicable",
      "health": "Not applicable",
      "id": "46467c16-1585-4b71-8e7f-f0bc5ff9da15",
      "location": "nalab2",
      "metadata": {
        "createdBy": "4c483a7e-207b-4f9a-87b7-799a4629d7c8",
        "creationTimestamp": "2021-07-30T14:26:19Z",
        "modificationTimestamp": "2021-07-30T14:26:19Z"
      },
      "ontap": {
        "backendManagementIP": "10.191.77.177",
        "managementIPs": [
          "10.191.77.177",
          "10.191.77.179"
        ]
      },
      "protectionPolicy": "Not applicable",
      "region": "Not applicable",
      "state": "Running",
      "stateUnready": [],
      "type": "application/astra-storageBackend",
      "version": "1.0",
      "zone": "Not applicable"
    }
  ]
}

```

## Clusters

### List managed clusters

You can list the Kubernetes clusters currently managed by Astra.

#### 1. List the clusters

Perform the following REST API call.

HTTP method	Path
GET	/account/{accountID}/topology/v1/managedClusters

**Curl example: Return all data for all clusters**

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

## 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.