

## Infrastructure workflows

**Astra Automation** 

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## 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 users 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	Туре	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

## **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"
        1
      },
      "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>'
```

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