# **■** NetApp

# **Get started**

**Astra Automation** 

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# **Get started**

# Before you begin

You can quickly prepare to get started using the Astra REST API by reviewing the steps described below.

#### **Review REST concepts and implementation**

Make sure to review Core REST implementation for information about REST concepts and the details regarding how the Astra REST API is designed.

#### Have Astra account credentials

You'll need Astra credentials to sign in to the Astra web user interface and generate an API token. With Astra Control Center, you manage these credentials locally. With Astra Control Service the account credentials are maintained by the **Auth0** service.

#### Get more information

You should be aware of the additional information resources as suggested in Additional resources.

### Get an API token

You must have an API access token to use the Astra REST API.



The Astra API tokens never expire, however you can revoke a token when it is no longer needed.

#### Before you begin

You need credentials for an Astra account.

#### About this task

This task generates an API token at the Astra web interface. You should also retrieve the account ID which is also needed to make an API call.

#### **Steps**

1. Sign in to Astra using your account credentials.

Access the following site for Astra Control Service: https://astra.netapp.io

- 2. Click the figure icon at the top right of the page and select **API access**.
- 3. Click Generate API token on the page and in the popup window click Generate API token.
- 4. Click the icon to copy the token string to the clipboard and save it in your editor.
- 5. Copy and save the account id which is available on the same page.

#### After you finish

When you access the Astra REST API through Curl or a programming language, you must include in the API bearer token in the Authorization request header. To revoke the token, see Security.

# Hello world

You can issue a simple Curl command at your workstation's CLI to get started using the Astra REST API and confirm its availability.

#### Before you begin

The Curl utility must be available on your local workstation. You must also have an API token and the associated account identifier. See Get an API token for more information.

#### **Curl example**

The following Curl command retrieves a list of Astra users. Provide the appropriate <ACCOUNT\_ID> and <API\_TOKEN> as indicated.

```
curl --location --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/core/v1/users' --header
'Content-Type: application/json' --header 'Authorization: Bearer
<API_TOKEN>'
```

# Prepare to use the workflows

You should be familiar with the organization and format of the Astra workflows before using them with a live deployment.

#### Introduction

A *workflow* is a sequence of one or more steps needed to accomplish a specific administrative task or goal. Each step in an Astra workflow is one of the following:

- REST API call (with details such as curl and JSON examples)
- · Invocation of another Astra workflow
- Miscellaneous related task (such as making a required design decision)

The workflows include the core steps and parameters needed to accomplish each task. They provide a starting point for customizing your automation environment.

# **Common input parameters**

The input parameters described below are common to all the curl samples used to illustrate a REST API call.



Because these input parameters are universally required, they are not described further in the individual workflows. If additional input parameters are used for a specific curl example, they are described in the section **Additional input parameters**.

#### Path parameters

The endpoint path used with every REST API call includes the following parameters. Also see URL format for more information.

#### Account ID

This is the UUIDv4 value identifying the Astra account where the API operation runs. See Get an API token for more information about locating your account ID.

#### Request headers

There are several request headers that you may need to include depending on the REST API call.

#### **Authorization**

All the API calls in the workflows need an API token to identify the user. You must include the token in the Authorization request header. See Get an API token for more information about generating an API token.

#### Content type

With the HTTP POST and PUT requests where JSON is included in the request body, you should declare the media type based on the Astra resource. For example, you can include the header Content-Type: application/astra-appSnap+json when creating a snapshot for a managed application.

#### **Accept**

You can declare the specific media type of the content you expect in the response based on the Astra resource. For example, you can include the header Accept: application/astra-appBackup+json when listing the backups for a managed application. However, for simplicity the curl samples in the workflows accept all media types.

#### Presentation of tokens and identifiers

The API token and other ID values used with the curl examples are opaque with no discernible meaning. And so to improve the readability of the samples, the actual token and ID values are not used. Rather, smaller reserved keywords are used which has several benefits:

- The curl and JSON samples are clearer and easier to understand.
- Because all the keywords use the same format with brackets and capital letters, you can quickly identify the location and content to insert or extract.
- · No value is lost because the original parameters cannot be copied and used with an actual deployment.

Here are some of the common reserved keywords used in the curl examples. This list is not exhaustive and additional keywords are used as needed. Their meaning should be obvious based on the context.

Keyword	Туре	Description
<account_id></account_id>	Path	The UUIDv4 value identifying the account where the API operation runs.
<api_token></api_token>	Header	The bearer token identifying and authorizing the caller.
<managed_app_id></managed_app_id>	Path	The UUIDv4 value identifying the managed application for the API call.

# **Workflow categories**

There are two broad categories of Astra workflows available based on your deployment model. If you are using Astra Control Center, you should start with the infrastructure workflows and then proceed to the management workflows. When using Astra Control Service, you can typically go directly to the management workflows.



The curl samples in the workflows use the URL for the Astra Control Service. You need to change the URL when using the on-premises Astra Control Center as appropriate for your environment.

#### Infrastructure workflows

These workflows deal with the Astra infrastructure, including credentials, buckets, and storage backends. They are needed with Astra Control Center but in most cases can also be used with Astra Control Service. The workflows focus on the tasks required to establish and maintain an Astra managed cluster.

#### **Management workflows**

You can use these workflows after you have a managed cluster. The workflows focus on application protection and support operations such as backing up, restoring, and cloning a managed app.

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