



# **Integrate data using APIs**

## **Active IQ Digital Advisor**

NetApp  
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# Table of Contents

- Integrate data using APIs ..... 1
  - Understand API Services ..... 1
  - Generate tokens to use APIs ..... 2
  - Use the API Catalog to execute APIs ..... 3

# Integrate data using APIs

## Understand API Services

Active IQ API Services uses automation to add efficiency to your workflows. Inside API Services resides the **API Catalog**, which describes over 100 different API endpoints that are grouped into 20+ different service areas. These APIs are available to you as a NetApp customer and they span different areas of interest, such as system information, storage efficiency, performance, health, and upgrades.

APIs are interfaces that enable you to write simple code that can contact Active IQ Digital Advisor programmatically and bring back data into your compute environment. You can write code in such a way that it contacts Active IQ Digital Advisor every day and brings back the latest data in the areas that are of interest to you. You can then use this data to populate your ticketing system or to create your own dashboards, webpages, or reports. The Active IQ API Catalog has both code samples and a facility for you to try out the APIs in the browser.

Automation with APIs is a great way to add efficiency and accuracy to daily or weekly tasks. It frees up your resources to perform more complex activities or to automate new workflows. For example, if you have system health risks that need to be fixed, you can automate at least the pullout of those items from Active IQ Digital Advisor and the push into your ticketing system.

### API Catalog

The toggle at the top of the page allows the user to switch between the two modes to view the Catalog. The Code view focuses on the input parameters needed, the content and format of the return data, and code samples to get the user started with putting code in place. The Experiment view offers the user a chance to “try out” the API in the browser using a generated token obtained from the main API Services page.

Either view allows the user to browse through available items using the navigation pane on the left. The items are organized by service in alphabetical order. Within a given service, you can expand the heading to show the individual API Endpoints. Clicking on the service heading or an API Endpoint will take you to that section of the Catalog in the middle pane.

### Using the APIs

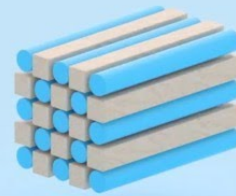
Once you are authorized and can generate tokens, you can leverage the tokens to make programmatic queries and retrieve data. You can also test out an API from within the API Catalog to see first-hand how the query works and the type of data that is returned. This is a great way to make sure you understand how an API will work prior to building out the code framework in your system.

# Accessing & Integrating APIs

Active IQ Digital Advisor

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## Generate tokens to use APIs

It is easy to register for API Services and generate tokens.

### Steps

1. From the **Quick Links** menu, click **API Services**.
2. Click **Register**.
3. Complete the request for authorization form and click **Submit**.

Activation is automatic and should be instantaneous. Once you have been authorized to use the Active IQ APIs, you can generate tokens to use when making programmatic API calls. You can also use these tokens to execute “try it out” from within the API Catalog. When obtained programmatically, tokens always come in sets of two: An Access Token and a Refresh Token. The Access Token must be passed to successfully use all APIs (except for one - the Refresh Token is used to programmatically obtain a new set of tokens).

4. On the Main API Services page, click **Generate Token** to view and download the access token and refresh token to invoke APIs.

The portal gives you multiple ways to save one or both tokens in the set. You can copy them to clipboard, download them as a text file, or view them as plain text.



You should download and save the access token and refresh token for later use. Access tokens expire one hour after generation and refresh tokens should be regenerated every 7 days and installed in the application. After 90 days, you will need to manually login and obtain a new access and refresh token.

# Use the API Catalog to execute APIs

The API Catalog allows you to browse through categories and the available APIs within each of those categories.

Using a valid Access Token and correct inputs for the required fields, you can make a test call for an API.

## Steps

1. From the **Quick Links** menu, click **API Services**.
2. Click **Browse** under the **API Catalog** icon.

The API Catalog is displayed.

3. Select any API
4. At the top of the page, slide the toggle to “Experiment”.
5. From the left navigation, expand the categories and select any API to view detailed information.
6. Expand the API.
7. Click the **Try it out** button on the right.
8. Provide the required parameters and click **Execute** to view the results.

You can also examine the **Responses** section of the API to understand the data that will be returned better. You can click on **Example Value** to see the format of the data or click on **Model** and click on the carets to expand the sections to see the definition of each element.

By sliding the toggle to the **Code** view, you can view code samples in various languages.

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