Integrate data using APIs

Digital Advisor

NetApp
May 08, 2024

This PDF was generated from https://docs.netapp.com/us-en/active-iq/concept_overview_API_service.html on May 08, 2024. Always check docs.netapp.com for the latest.

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

Digital Advisor 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 Digital Advisor programmatically and bring back data into your compute environment. You can write code in such a way that it contacts 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 Digital Advisor 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 Digital Advisor and the push into your ticketing system.

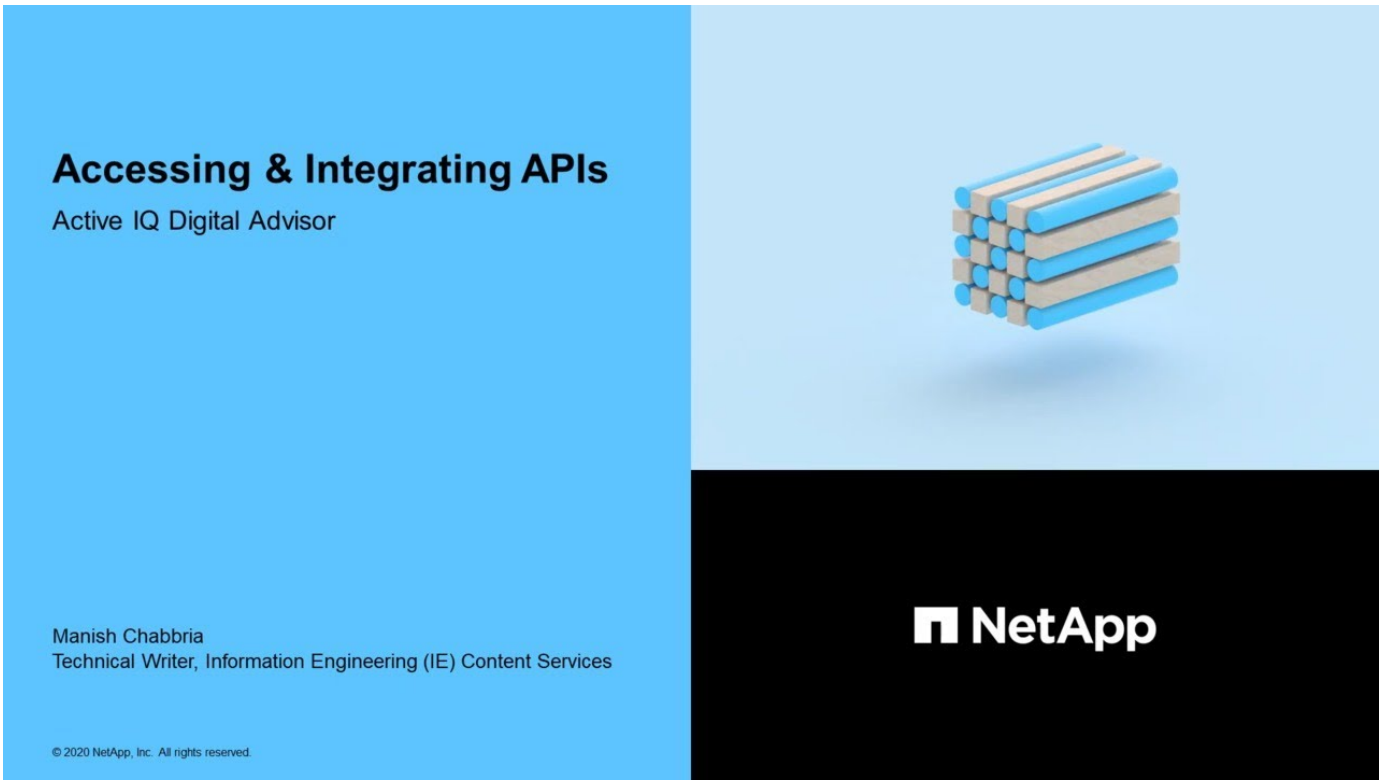
API Catalog

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.



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 Digital Advisor 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, manually, every 7 days and installed in the application. To do this, you do not need to log in to the application. However, after 90 days, you need to log in to the application to 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.

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.