



## **Resources and endpoints**

### **Astra Automation**

David Peterson  
August 04, 2021

# Table of Contents

- Resources and endpoints ..... 1
  - Astra REST resources and endpoints ..... 1
  - Additional resources and endpoints ..... 3

# Resources and endpoints

You can use the resources provided through REST API to automate an Astra deployment. Each resource is access through one or more endpoints. This section provides an introduction to the REST resources which you can use as part of planning an automation deployment.



The format of the path and full URL used to access the Astra resources is based on several values. See [URL format](#) for more information. Also see [API reference](#) for details about using the Astra resources and endpoints.

## Astra REST resources and endpoints

The primary resource endpoints provided in the Astra REST API are organized in three categories. Each resource can be accessed with the full set of CRUD operations (create, read, update, delete) except where noted.

### Core resources

The core resource endpoints provide the foundational services needed to establish and maintain the Astra runtime environment.

#### ASUP

The ASUP resources represent the AutoSupport bundles forwarded to NetApp support.

#### Credential

The credential resources contain security related information which can be used with Astra users, clusters, buckets, and storage backends.

#### Entitlement

The entitlement resources represent the features and capacities available for an account based on the active licenses and subscriptions.

#### Event

The event resources represent all the events occurring in the system, including the subset classified as notifications.

#### Feature

The feature resources represent selected Astra features that you can query to determine if they are enabled or disabled in the system. Access is limited to read-only.

#### License

The license resources represent the licenses available for an Astra account.

#### Notification

The notification resources represent Astra events that have a notification destination. Access is provided on a per-user basis.

## **Role Binding**

The role binding resources represent the relationships between specific pairs of users and accounts. In addition to the linkage between the two, a set of permissions is specified for each through a specific role.

## **Setting**

The setting resources represent a collection of key-value pairs which describe a feature for a specific Astra account.

## **Subscription**

The subscription resources represent the active subscriptions for an Astra account.

## **Token**

The token resources represent the tokens available to programmatically access the Astra REST API.

## **Unread notification**

The unread notification resources represent notifications assigned to a specific user but not yet read.

## **User**

The user resources represent Astra users able to access the system based on their defined role.

## **Managed application resources**

The managed application resource endpoints provide access to the managed Kubernetes applications.

### **Application asset**

The application asset resources represent internal collections of state information needed to manage the Astra applications.

### **Application backup**

The application backup resources represent backups of the managed applications.

### **Application snapshot**

The application snapshot resources represent snapshots of the managed applications.

### **Managed application**

The managed app resources represent Kubernetes applications that are managed by Astra.

### **Schedule**

The schedule resources represent data protection operations that are scheduled for the managed applications as part of a data protection policy.

## **Topology resources**

The topology resource endpoints provide access to the unmanaged applications and storage resources.

### **App**

The app resources represent all of the Kubernetes applications, including those unmanaged by Astra.

### **Bucket**

The bucket resources represent the S3 cloud buckets used to store backups of the applications managed by Astra.

## Cloud

The cloud resources represent clouds that Astra clients can connect to in order to manage clusters and applications.

## Cluster

The cluster resources represent the Kubernetes clusters not managed by Kubernetes.

## Managed cluster

The managed cluster resources represent the Kubernetes clusters currently managed by Kubernetes.

## Storage backend

The storage backend resources represent providers of storage services that can be used by the Astra managed clusters and applications.

## Storage class

The storage class resources represent different classes or types of storage discovered and available to a specific managed cluster.

## Volume

The volume resources represent the Kubernetes storage volumes associated with the managed applications.

# Additional resources and endpoints

There are several additional resources and endpoints that you can use to support an Astra deployment.



These resources and endpoints are not currently included with the Astra API reference documentation.

## OpenAPI

The OpenAPI endpoints provide access to the current OpenAPI JSON document and other related resources.

## OpenMetrics

The OpenMetrics endpoints provide access to the account metrics through the OpenMetrics resource. Support is available with the Astra Control Center deployment model.

## 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.