



## Resources

### Astra Automation

NetApp  
September 16, 2022

# Table of Contents

- Resources and endpoints. . . . . 1
  - Summary of Astra Control REST resources. . . . . 1
  - Additional resources and endpoints . . . . . 3

# Resources and endpoints

You can access the resources provided through the Astra Control REST API to automate an Astra deployment. Each resource is available through one or more endpoints. The information presented below provides an introduction to the REST resources you can use as part of an automation deployment.



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

## Summary of Astra Control REST resources

The primary resource endpoints provided in the Astra Control 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.

The **Release** column indicates the Astra release when the resource was first introduced. This field is bolded for resources newly added with the current release.

### Core resources

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

Resource	Release	Description
Account	21.12	The account resources allow you to manage the isolated tenants within the multitenant Astra Control deployment environment.
ASUP	21.08	The ASUP resources represent the AutoSupport bundles forwarded to NetApp support.
Certificate	<b>22.08</b>	The certificate resources represent the installed certificates used for strong authentication for outgoing connections.
Credential	21.04	The credential resources contain security related information which can be used with Astra users, clusters, buckets, and storage backends.
Entitlement	21.08	The entitlement resources represent the features and capacities available for an account based on the active licenses and subscriptions.
Event	21.04	The event resources represent all the events occurring in the system, including the subset classified as notifications.
Execution hook	21.12	The execution hook resources represent custom scripts that you can run either before or after a snapshot of a managed app is performed.
Feature	21.08	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.
Group	<b>22.08</b>	The group resources represent the Astra groups and associated resources. Only LDAP groups are supported in the current release.

Resource	Release	Description
Hook source	21.12	The hook source resources represent the actual source code used with an execution hook. Separating the source code from the execution control has several benefits such as allowing the scripts to be shared.
License	21.08	The license resources represent the licenses available for an Astra account.
Notification	21.04	The notification resources represent Astra events that have a notification destination. Access is provided on a per-user basis.
Package	22.04	The package resources provide registration of and access to package definitions. Software packages consist of various components including files, images, and other artifacts.
Role binding	21.04	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	21.08	The setting resources represent a collection of key-value pairs which describe a feature for a specific Astra account.
Subscription	21.08	The subscription resources represent the active subscriptions for an Astra account.
Token	21.04	The token resources represent the tokens available to programmatically access the Astra Control REST API.
Unread notification	21.04	The unread notification resources represent notifications assigned to a specific user but not yet read.
Upgrade	22.04	The upgrade resources provide access to software components and the ability to initiate upgrades.
User	21.04	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.

Resource	Release	Description
Application asset	21.04	The application asset resources represent internal collections of state information needed to manage the Astra applications.
Application backup	21.04	The application backup resources represent backups of the managed applications.
Application snapshot	21.04	The application snapshot resources represent snapshots of the managed applications.
Execution hook override	21.12	The execution hook override resources allow you to disable the preloaded NetApp default execution hooks for specific applications as needed.
Managed application	21.04	The managed app resources represent Kubernetes applications that are managed by Astra.
Schedule	21.04	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.

Resource	Release	Description
App	21.04	The app resources represent all of the Kubernetes applications, including those unmanaged by Astra.
AppMirror	<b>22.08</b>	The AppMirror resources represent the AppMirror resources to provide for the management of application mirroring relationships.
Bucket	21.08	The bucket resources represent the S3 cloud buckets used to store backups of the applications managed by Astra.
Cloud	21.08	The cloud resources represent clouds that Astra clients can connect to in order to manage clusters and applications.
Cluster	21.08	The cluster resources represent the Kubernetes clusters not managed by Kubernetes.
Cluster node	21.12	The cluster node resources provide additional resolution by allowing you to access the individual nodes within a Kubernetes cluster.
Managed cluster	21.08	The managed cluster resources represent the Kubernetes clusters currently managed by Kubernetes.
Managed storage backend	21.12	The managed storage backend resources allow you to access abstracted representations of the backend storage providers. These storage backends can be used by the managed clusters and applications.
Namespace	21.12	The namespace resources provide access to the namespaces used within a Kubernetes cluster.
Storage backend	21.08	The storage backend resources represent providers of storage services that can be used by the Astra managed clusters and applications.
Storage class	21.08	The storage class resources represent different classes or types of storage discovered and available to a specific managed cluster.
Storage device	21.12	The storage device resources provide access to the disks associated with a specific storage node for Astra Data Store (ADS) type storage backends. An ADS storage backends is deployed as a Kubernetes clusters.
Storage node	21.12	The storage node resources represent the nodes that are part of an ADS cluster.
Volume	21.04	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 Control REST 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 © 2022 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.