



Application Snapshot

Astra Automation

NetApp
February 12, 2024

This PDF was generated from https://docs.netapp.com/us-en/astra-automation-2304/reference/application_snapshot_overview.html on February 12, 2024. Always check docs.netapp.com for the latest.

Table of Contents

- Application Snapshot 1
 - Application Snapshot overview 1
 - Create a new application snapshot for an app 1
 - List the application snapshots for an app 12
 - Retrieve an application snapshot 22
 - Delete an application snapshot 30

Application Snapshot

Application Snapshot overview

The Application Snapshot API enables a user to create and view snapshots of a managed application.

Create a new application snapshot for an app

POST /accounts/{account_id}/k8s/v1/apps/{app_id}/appSnaps

Indicates the desired values for the Application Snapshot API resource to be created.

Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none">example: <code>{{.Account}}</code>
app_id	string	path	True	ID of the containing app resource

Request Body

Indicates the desired values for the Application Snapshot API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none">"application/astra-appSnap"
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none">"1.0""1.1""1.2"

Name	Type	Required	Description
name	string	False	<p>JSON string containing a user-specified name for the snapshot. If not specified, or when snapshots are initiated by a schedule, the system assigns a name for the snapshot. Defined values are:</p> <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 63 • Conforms to the DNS 1123 Label Schema
metadata	type_astra_metadata	False	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Metadata Schema. If not specified on create, a metadata object will be created with no labels.

Example request

```
{
  "type": "application/astra-appSnap",
  "version": "1.2",
  "name": "app-name-245"
}
```

Response

Status: 201, Returns the newly created appSnap resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> • "application/astra-appSnap"
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> • "1.0" • "1.1" • "1.2"
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> • Conforms to the UUIDv4 Schema
name	string	True	JSON string containing a user-specified name for the snapshot. If not specified, or when snapshots are initiated by a schedule, the system assigns a name for the snapshot. Defined values are: <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 63 • Conforms to the DNS 1123 Label Schema

Name	Type	Required	Description
scheduleID	string	False	<p>JSON string containing an optional schedule ID that indicates that the snapshot was triggered by a schedule and specifies which schedule triggered the snapshot. Only present for snapshots initiated by a schedule. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema
snapshotAppAsset	string	False	<p>JSON string containing the ID of the application asset corresponding to the snapshot. This field will be returned when the state of the application snapshot is "completed". Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the snapshot. Defined values are:</p> <ul style="list-style-type: none"> • "pending" - The application snapshot is scheduled for discovery • "discovering" - The application snapshot is in the process of being discovered • "running" - The application snapshot is running normally • "completed" - The application snapshot has completed • "failed" - The application snapshot is in a permanent failure state • "removed" - The application snapshot is not currently accessible • "unknown" - The application snapshot state cannot be determined
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why an application snapshot is unable to transition to "running", or why it has transitioned to "failed". Defined values are:</p> <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 127

Name	Type	Required	Description
hookState	string	False	<p>JSON string containing a value indicating the state of any execution hook or hooks running as a part of a snapshot. Defined values are:</p> <ul style="list-style-type: none"> • "failed" - One or more execution hooks have failed • "success" - There were zero or more applicable hooks and all were successful
hookStateDetails	array[type_astra_stateDetail]	False	<p>JSON array of JSON objects which lists additional details about why "hookState" transitioned into "failed". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> • Minimum items: 0
metadata	type_astra_metadata	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.

Example response

```
{
  "type": "application/astra-appSnap",
  "version": "1.2",
  "id": "4f56a1df-8f47-541a-bd81-77260053a2f6",
  "name": "app-name-245",
  "scheduleID": "1fe83650-9b3c-41ef-bb25-a2910c19c33e",
  "state": "pending",
  "stateUnready": [],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with
an idempotent value.",
  "status": "409"
}
```

Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	True	
status	string	True	
correlationID	string	False	

Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

Definitions

See Definitions

type_astra_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type_astra_metadata

Client and service-specified metadata associated with the resource. Defined values are:

- Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

type_astra_stateDetail

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field

Name	Type	Required	Description
reason	string	True	Reason why the request body field is invalid

List the application snapshots for an app

GET /accounts/{account_id}/k8s/v1/apps/{app_id}/appSnaps

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource • example: {{.Account}}
app_id	string	path	True	ID of the containing app resource
include	string	query	False	Indicates which fields should be returned when listing a collection. URL examples: "include=id", "include=id,name" OpenAPI examples: "id" • example: id,name,state

Name	Type	In	Required	Description
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection. URL examples: "limit=2" OpenAPI examples: "2"

Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: appSnap_1.2_get_response_body , array[]]	True	
metadata	type_astra_metadata_list	True	

Example response

```
{
  "type": "application/astra-appSnaps",
  "version": "1.2",
  "items": [
    [
      "2b6dafc3-2172-4431-a482-6306b2703130",
      "app-name-245",
      "pending"
    ],
    [
      "6fd9b31a-3924-4c9a-878b-175fa9538b8c",
      "app-name-244",
      "completed"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

Definitions

See Definitions

type_astra_stateDetail

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

type_astra_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type_astra_metadata

Client and service-specified metadata associated with the resource. Defined values are:

- Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

appSnap_1.2_get_response_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none">• "application/astra-appSnap"

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> • "1.0" • "1.1" • "1.2"
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> • Conforms to the UUIDv4 Schema
name	string	True	JSON string containing a user-specified name for the snapshot. If not specified, or when snapshots are initiated by a schedule, the system assigns a name for the snapshot. Defined values are: <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 63 • Conforms to the DNS 1123 Label Schema
scheduleID	string	False	JSON string containing an optional schedule ID that indicates that the snapshot was triggered by a schedule and specifies which schedule triggered the snapshot. Only present for snapshots initiated by a schedule. Defined values are: <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema

Name	Type	Required	Description
snapshotAppAsset	string	False	<p>JSON string containing the ID of the application asset corresponding to the snapshot. This field will be returned when the state of the application snapshot is "completed". Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema
state	string	True	<p>JSON string containing a value indicating the operational state of the snapshot. Defined values are:</p> <ul style="list-style-type: none"> • "pending" - The application snapshot is scheduled for discovery • "discovering" - The application snapshot is in the process of being discovered • "running" - The application snapshot is running normally • "completed" - The application snapshot has completed • "failed" - The application snapshot is in a permanent failure state • "removed" - The application snapshot is not currently accessible • "unknown" - The application snapshot state cannot be determined

Name	Type	Required	Description
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why an application snapshot is unable to transition to "running", or why it has transitioned to "failed". Defined values are:</p> <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 127
hookState	string	False	<p>JSON string containing a value indicating the state of any execution hook or hooks running as a part of a snapshot. Defined values are:</p> <ul style="list-style-type: none"> • "failed" - One or more execution hooks have failed • "success" - There were zero or more applicable hooks and all were successful
hookStateDetails	array[type_astra_stateDe tail]	False	<p>JSON array of JSON objects which lists additional details about why "hookState" transitioned into "failed". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> • Minimum items: 0

Name	Type	Required	Description
metadata	type_astra_metadata	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.

type_astra_metadata_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

Retrieve an application snapshot

GET /accounts/{account_id}/k8s/v1/apps/{app_id}/appSnaps/{appSnap_id}

Returns the stored Application Snapshot API resource in the JSON response body.

Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none">example: {{.Account}}
app_id	string	path	True	ID of the containing app resource
appSnap_id	string	path	True	ID of the appSnap collection to list

Response

Status: 200, Returns the stored Application Snapshot API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none">"application/astra-appSnap"
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none">"1.0""1.1""1.2"
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none">Conforms to the UUIDv4 Schema

Name	Type	Required	Description
name	string	True	<p>JSON string containing a user-specified name for the snapshot. If not specified, or when snapshots are initiated by a schedule, the system assigns a name for the snapshot. Defined values are:</p> <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 63 • Conforms to the DNS 1123 Label Schema
scheduleID	string	False	<p>JSON string containing an optional schedule ID that indicates that the snapshot was triggered by a schedule and specifies which schedule triggered the snapshot. Only present for snapshots initiated by a schedule. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema
snapshotAppAsset	string	False	<p>JSON string containing the ID of the application asset corresponding to the snapshot. This field will be returned when the state of the application snapshot is "completed". Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the snapshot. Defined values are:</p> <ul style="list-style-type: none"> • "pending" - The application snapshot is scheduled for discovery • "discovering" - The application snapshot is in the process of being discovered • "running" - The application snapshot is running normally • "completed" - The application snapshot has completed • "failed" - The application snapshot is in a permanent failure state • "removed" - The application snapshot is not currently accessible • "unknown" - The application snapshot state cannot be determined
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why an application snapshot is unable to transition to "running", or why it has transitioned to "failed". Defined values are:</p> <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 127

Name	Type	Required	Description
hookState	string	False	<p>JSON string containing a value indicating the state of any execution hook or hooks running as a part of a snapshot. Defined values are:</p> <ul style="list-style-type: none"> • "failed" - One or more execution hooks have failed • "success" - There were zero or more applicable hooks and all were successful
hookStateDetails	array[type_astra_stateDetail]	False	<p>JSON array of JSON objects which lists additional details about why "hookState" transitioned into "failed". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> • Minimum items: 0
metadata	type_astra_metadata	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.

Example response

```
{
  "type": "application/astra-appSnap",
  "version": "1.2",
  "id": "4f56a1df-8f47-541a-bd81-77260053a2f6",
  "name": "app-name-245",
  "scheduleID": "1fe83650-9b3c-41ef-bb25-a2910c19c33e",
  "state": "pending",
  "stateUnready": [],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

Definitions

See Definitions

type_astra_stateDetail

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

type_astra_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type_astra_metadata

Client and service-specified metadata associated with the resource. Defined values are:

- Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

Delete an application snapshot

DELETE /accounts/{account_id}/k8s/v1/apps/{app_id}/appSnaps/{appSnap_id}

Removes the specified Application Snapshot API resource.

Side Effects

- If a snapshot is in progress, the snapshot is cancelled.
- If a snapshot is complete, the snapshot data is deleted.

Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource • example: {{.Account}}
app_id	string	path	True	ID of the containing app resource
appSnap_id	string	path	True	ID of the appSnap collection to list

Response

Status: 204, Indicates if the appSnap resource was deleted.

Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

Example response

```
{
  "type": "https://astra.netapp.io/problems/144",
  "title": "Backup in progress",
  "detail": "The snapshot wasn't deleted because it is currently being
used by a backup.",
  "status": "409"
}
```

Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

Definitions

See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

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.