



# Upgrade

## Astra Automation

NetApp  
March 09, 2024

# Sommaire

- Upgrade ..... 1
  - Upgrade overview ..... 1
  - List all upgrades ..... 1
  - Retrieve an upgrade ..... 12
  - Modify an upgrade ..... 21

# Upgrade

## Upgrade overview

The Upgrade App API provides access to software components that are eligible for upgrade, and to initiate upgrades. The availability of upgrades is determined based on packages registered with the Packages API.

## List all upgrades

GET `/accounts/{account_id}/core/v1/upgrades`

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 <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: id,componentName,upgradeVersion</li></ul>

Name	Type	In	Required	Description
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## 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: <a href="#">upgrade_1.1_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

### Example response

```
{
  "type": "application/astra-upgrades",
  "version": "1.1",
  "items": [
    [
      "01982783-b1eb-4dca-a3fe-a385a3186c53",
      "acc",
      "21.07.1"
    ],
    [
      "0a5abab2-39b2-4101-87b9-0d9b8f537ca1",
      "acc",
      "21.07.2"
    ]
  ],
  "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	

Name	Type	Required	Description
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

additionalDetails

type\_astra\_stateDetail

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
additionalDetails	<a href="#">additionalDetails</a>	False	

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

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

- Conforms to the Astra Metadata Schema If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

upgrade\_1.1\_get\_response\_body

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

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
componentName	string	True	JSON string containing the name of the type of software that can be upgraded. Defined values are: <ul style="list-style-type: none"> <li>• "acc"</li> <li>• "acs"</li> <li>• "trident"</li> <li>• "kubernetes"</li> </ul>
componentInstance	string	True	JSON string containing the URI of the component that can be upgraded. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>
componentID	string	True	JSON string containing a globally unique identifier of the component that can be upgraded. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
upgradeVersion	string	True	<p>JSON string containing the SemVer of the software image file that can be upgraded to. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>
currentVersion	string	True	<p>JSON string containing the current SemVer of the entity to be upgraded. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>
dependencies	array[string]	True	<p>JSON array of JSON strings, each containing the UUID of an upgrade that must be completed before this upgrade can proceed. Used to determine which upgrades will be performed as prerequisites and in which order. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the upgrade. If auto-upgrade is enabled, upgrades will start in the "scheduled" state. Otherwise, upgrades will start in the "proposed" state. Defined values are:</p> <ul style="list-style-type: none"><li>• "unavailable" - The upgrade is not available at this time</li><li>• "proposed" - The upgrade is proposed but will not automatically run until approved</li><li>• "scheduled" - The upgrade is approved but is not ready to be installed due to dependencies, time windows, or available resources</li><li>• "running" - The upgrade is in progress</li><li>• "complete" - The upgrade has completed</li><li>• "failed" - The upgrade did not complete</li></ul>

Name	Type	Required	Description
stateDesired	string	True	<p>JSON string containing a value indicating the desired state for "state". This field is only included when the user can directly request a change in the state of the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• "proposed" - The upgrade is not approved and must not be performed</li> <li>• "scheduled" - The upgrade is approved and must be performed in the specified time window</li> <li>• "running" - The upgrade must be performed immediately, regardless of the time window</li> </ul>
stateDetails	array[type_astra_stateDe tail]	True	<p>JSON array of JSON objects that lists additional details about the current "state". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	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 upgrade

GET /accounts/{account\_id}/core/v1/upgrades/{upgrade\_id}

Returns the stored Upgrade 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"><li>example: <code>{{.Account}}</code></li></ul>
upgrade_id	string	path	True	ID of the upgrade collection to list

## Response

Status: 200, Returns the stored Upgrade 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"><li>"application/astra-upgrade"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
componentName	string	True	<p>JSON string containing the name of the type of software that can be upgraded. Defined values are:</p> <ul style="list-style-type: none"> <li>• "acc"</li> <li>• "acs"</li> <li>• "trident"</li> <li>• "kubernetes"</li> </ul>
componentInstance	string	True	<p>JSON string containing the URI of the component that can be upgraded. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>
componentID	string	True	<p>JSON string containing a globally unique identifier of the component that can be upgraded. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
upgradeVersion	string	True	<p>JSON string containing the SemVer of the software image file that can be upgraded to. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>
currentVersion	string	True	<p>JSON string containing the current SemVer of the entity to be upgraded. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>



Name	Type	Required	Description
dependencies	array[string]	True	<p>JSON array of JSON strings, each containing the UUID of an upgrade that must be completed before this upgrade can proceed. Used to determine which upgrades will be performed as prerequisites and in which order. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
state	string	True	<p>JSON string containing a value indicating the operational state of the upgrade. If auto-upgrade is enabled, upgrades will start in the "scheduled" state. Otherwise, upgrades will start in the "proposed" state. Defined values are:</p> <ul style="list-style-type: none"> <li>• "unavailable" - The upgrade is not available at this time</li> <li>• "proposed" - The upgrade is proposed but will not automatically run until approved</li> <li>• "scheduled" - The upgrade is approved but is not ready to be installed due to dependencies, time windows, or available resources</li> <li>• "running" - The upgrade is in progress</li> <li>• "complete" - The upgrade has completed</li> <li>• "failed" - The upgrade did not complete</li> </ul>

Name	Type	Required	Description
stateDesired	string	True	<p>JSON string containing a value indicating the desired state for "state". This field is only included when the user can directly request a change in the state of the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• "proposed" - The upgrade is not approved and must not be performed</li> <li>• "scheduled" - The upgrade is approved and must be performed in the specified time window</li> <li>• "running" - The upgrade must be performed immediately, regardless of the time window</li> </ul>
stateDetails	array[type_astra_stateDetail]	True	<p>JSON array of JSON objects that lists additional details about the current "state". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-upgrade",
  "version": "1.1",
  "id": "aa9a8e88-c012-55b1-b514-7cd94dc79008",
  "componentName": "trident",
  "componentInstance": "https://<dns_name>/accounts/0b311ae7-d89a-4a11-
a52c-1349ca090415/topology/v1/clouds/fdda3ff3-a46a-43a4-902e-
444fde2baeba/storageBackends/72d19c3c-eb43-4bec-b23e-a228c900aded",
  "componentID": "72d19c3c-eb43-4bec-b23e-a228c900aded",
  "upgradeVersion": "21.07.1",
  "currentVersion": "21.04.1",
  "dependencies": [],
  "state": "scheduled",
  "stateDesired": "scheduled",
  "stateDetails": [],
  "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

additionalDetails

type\_astra\_stateDetail

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
additionalDetails	<a href="#">additionalDetails</a>	False	

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

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

- Conforms to the Astra Metadata Schema If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	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

# Modify an upgrade

PUT /accounts/{account\_id}/core/v1/upgrades/{upgrade\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

## Side Effects

- Upgrades are scheduled or run based on desired state.

## Parameters

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

## Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

## Side Effects

- Upgrades are scheduled or run based on desired state.

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

Name	Type	Required	Description
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
componentName	string	False	JSON string containing the name of the type of software that can be upgraded. Defined values are: <ul style="list-style-type: none"> <li>• "acc"</li> <li>• "acs"</li> <li>• "trident"</li> <li>• "kubernetes"</li> </ul>
componentInstance	string	False	JSON string containing the URI of the component that can be upgraded. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>
componentID	string	False	JSON string containing a globally unique identifier of the component that can be upgraded. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
upgradeVersion	string	False	JSON string containing the SemVer of the software image file that can be upgraded to. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>



Name	Type	Required	Description
currentVersion	string	False	<p>JSON string containing the current SemVer of the entity to be upgraded. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>
dependencies	array[string]	False	<p>JSON array of JSON strings, each containing the UUID of an upgrade that must be completed before this upgrade can proceed. Used to determine which upgrades will be performed as prerequisites and in which order. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
state	string	False	<p>JSON string containing a value indicating the operational state of the upgrade. If auto-upgrade is enabled, upgrades will start in the "scheduled" state. Otherwise, upgrades will start in the "proposed" state. Defined values are:</p> <ul style="list-style-type: none"> <li>• "unavailable" - The upgrade is not available at this time</li> <li>• "proposed" - The upgrade is proposed but will not automatically run until approved</li> <li>• "scheduled" - The upgrade is approved but is not ready to be installed due to dependencies, time windows, or available resources</li> <li>• "running" - The upgrade is in progress</li> <li>• "complete" - The upgrade has completed</li> <li>• "failed" - The upgrade did not complete</li> </ul>

Name	Type	Required	Description
stateDesired	string	False	<p>JSON string containing a value indicating the desired state for "state". This field is only included when the user can directly request a change in the state of the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• "proposed" - The upgrade is not approved and must not be performed</li> <li>• "scheduled" - The upgrade is approved and must be performed in the specified time window</li> <li>• "running" - The upgrade must be performed immediately, regardless of the time window</li> </ul>
stateDetails	array[type_astra_stateDetail]	False	<p>JSON array of JSON objects that lists additional details about the current "state". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
metadata	type_astra_metadata_update	False	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-upgrade",
  "version": "1.1",
  "stateDesired": "running"
}
```

### Response

Status: 204, Indicates if the upgrade resource was updated.

### 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	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### 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/1",  
  "title": "Resource not found",  
  "detail": "The resource specified in the request URI wasn't found.",  
  "status": "404"  
}
```

### Definitions

## See Definitions

additionalDetails

type\_astra\_stateDetail

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
additionalDetails	<a href="#">additionalDetails</a>	False	

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

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

- Conforms to the Astra Metadata Schema If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	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

invalidFields



<b>Name</b>	<b>Type</b>	<b>Required</b>	<b>Description</b>
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Informations sur le copyright

Copyright © 2024 NetApp, Inc. Tous droits réservés. Imprimé aux États-Unis. Aucune partie de ce document protégé par copyright ne peut être reproduite sous quelque forme que ce soit ou selon quelque méthode que ce soit (graphique, électronique ou mécanique, notamment par photocopie, enregistrement ou stockage dans un système de récupération électronique) sans l'autorisation écrite préalable du détenteur du droit de copyright.

Les logiciels dérivés des éléments NetApp protégés par copyright sont soumis à la licence et à l'avis de non-responsabilité suivants :

CE LOGICIEL EST FOURNI PAR NETAPP « EN L'ÉTAT » ET SANS GARANTIES EXPRESSES OU TACITES, Y COMPRIS LES GARANTIES TACITES DE QUALITÉ MARCHANDE ET D'ADÉQUATION À UN USAGE PARTICULIER, QUI SONT EXCLUES PAR LES PRÉSENTES. EN AUCUN CAS NETAPP NE SERA TENU POUR RESPONSABLE DE DOMMAGES DIRECTS, INDIRECTS, ACCESSOIRES, PARTICULIERS OU EXEMPLAIRES (Y COMPRIS L'ACHAT DE BIENS ET DE SERVICES DE SUBSTITUTION, LA PERTE DE JOUISSANCE, DE DONNÉES OU DE PROFITS, OU L'INTERRUPTION D'ACTIVITÉ), QUELLES QU'EN SOIENT LA CAUSE ET LA DOCTRINE DE RESPONSABILITÉ, QU'IL S'AGISSE DE RESPONSABILITÉ CONTRACTUELLE, STRICTE OU DÉLICTEUELLE (Y COMPRIS LA NÉGLIGENCE OU AUTRE) DÉCOULANT DE L'UTILISATION DE CE LOGICIEL, MÊME SI LA SOCIÉTÉ A ÉTÉ INFORMÉE DE LA POSSIBILITÉ DE TELS DOMMAGES.

NetApp se réserve le droit de modifier les produits décrits dans le présent document à tout moment et sans préavis. NetApp décline toute responsabilité découlant de l'utilisation des produits décrits dans le présent document, sauf accord explicite écrit de NetApp. L'utilisation ou l'achat de ce produit ne concède pas de licence dans le cadre de droits de brevet, de droits de marque commerciale ou de tout autre droit de propriété intellectuelle de NetApp.

Le produit décrit dans ce manuel peut être protégé par un ou plusieurs brevets américains, étrangers ou par une demande en attente.

LÉGENDE DE RESTRICTION DES DROITS : L'utilisation, la duplication ou la divulgation par le gouvernement sont sujettes aux restrictions énoncées dans le sous-paragraphe (b)(3) de la clause Rights in Technical Data-Noncommercial Items du DFARS 252.227-7013 (février 2014) et du FAR 52.227-19 (décembre 2007).

Les données contenues dans les présentes se rapportent à un produit et/ou service commercial (tel que défini par la clause FAR 2.101). Il s'agit de données propriétaires de NetApp, Inc. Toutes les données techniques et tous les logiciels fournis par NetApp en vertu du présent Accord sont à caractère commercial et ont été exclusivement développés à l'aide de fonds privés. Le gouvernement des États-Unis dispose d'une licence limitée irrévocable, non exclusive, non cessible, non transférable et mondiale. Cette licence lui permet d'utiliser uniquement les données relatives au contrat du gouvernement des États-Unis d'après lequel les données lui ont été fournies ou celles qui sont nécessaires à son exécution. Sauf dispositions contraires énoncées dans les présentes, l'utilisation, la divulgation, la reproduction, la modification, l'exécution, l'affichage des données sont interdits sans avoir obtenu le consentement écrit préalable de NetApp, Inc. Les droits de licences du Département de la Défense du gouvernement des États-Unis se limitent aux droits identifiés par la clause 252.227-7015(b) du DFARS (février 2014).

## Informations sur les marques commerciales

NETAPP, le logo NETAPP et les marques citées sur le site <http://www.netapp.com/TM> sont des marques déposées ou des marques commerciales de NetApp, Inc. Les autres noms de marques et de produits sont des marques commerciales de leurs propriétaires respectifs.