



# Upgrade

## Astra Automation

NetApp  
December 01, 2023

# 目錄

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

## 版權資訊

Copyright © 2023 NetApp, Inc. 版權所有。台灣印製。非經版權所有人事先書面同意，不得將本受版權保護文件的任何部分以任何形式或任何方法（圖形、電子或機械）重製，包括影印、錄影、錄音或儲存至電子檢索系統中。

由 NetApp 版權資料衍伸之軟體必須遵守下列授權和免責聲明：

此軟體以 NETAPP「原樣」提供，不含任何明示或暗示的擔保，包括但不限於有關適售性或特定目的適用性之擔保，特此聲明。於任何情況下，就任何已造成或基於任何理論上責任之直接性、間接性、附隨性、特殊性、懲罰性或衍生性損害（包括但不限於替代商品或服務之採購；使用、資料或利潤上的損失；或企業營運中斷），無論是在使用此軟體時以任何方式所產生的契約、嚴格責任或侵權行為（包括疏忽或其他）等方面，NetApp 概不負責，即使已被告知有前述損害存在之可能性亦然。

NetApp 保留隨時變更本文所述之任何產品的權利，恕不另行通知。NetApp 不承擔因使用本文所述之產品而產生的責任或義務，除非明確經過 NetApp 書面同意。使用或購買此產品並不會在依據任何專利權、商標權或任何其他 NetApp 智慧財產權的情況下轉讓授權。

本手冊所述之產品受到一項（含）以上的美國專利、國外專利或申請中專利所保障。

有限權利說明：政府機關的使用、複製或公開揭露須受 DFARS 252.227-7013（2014 年 2 月）和 FAR 52.227-19（2007 年 12 月）中的「技術資料權利 - 非商業項目」條款 (b)(3) 小段所述之限制。

此處所含屬於商業產品和 / 或商業服務（如 FAR 2.101 所定義）的資料均為 NetApp, Inc. 所有。根據本協議提供的所有 NetApp 技術資料和電腦軟體皆屬於商業性質，並且完全由私人出資開發。美國政府對於該資料具有非專屬、非轉讓、非轉授權、全球性、有限且不可撤銷的使用權限，僅限於美國政府為傳輸此資料所訂合約所允許之範圍，並基於履行該合約之目的方可使用。除非本文另有規定，否則未經 NetApp Inc. 事前書面許可，不得逕行使用、揭露、重製、修改、履行或展示該資料。美國政府授予國防部之許可權利，僅適用於 DFARS 條款 252.227-7015(b)（2014 年 2 月）所述權利。

## 商標資訊

NETAPP、NETAPP 標誌及 <http://www.netapp.com/TM> 所列之標章均為 NetApp, Inc. 的商標。文中所涉及的所有其他公司或產品名稱，均為其各自所有者的商標，不得侵犯。