



Upgrade

Astra Automation

NetApp
December 01, 2023

目录

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">example: {{.Account}}
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">example: id,componentName,upgradeVersion

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"> • eq - Equality • lt/gt - Less than/Greater than • lte/gte - Less than or equals to/Greater than or equals to <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: upgrade_1.1_get_response_body , array[]]	True	
metadata	type_astra_metadata_list	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	additionalDetails	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[type_astra_label]	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">• "application/astra-upgrade"

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

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"> • Conforms to the SemVer Schema
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"> • Conforms to the SemVer Schema
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"> • 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 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"> • "unavailable" - The upgrade is not available at this time • "proposed" - The upgrade is proposed but will not automatically run until approved • "scheduled" - The upgrade is approved but is not ready to be installed due to dependencies, time windows, or available resources • "running" - The upgrade is in progress • "complete" - The upgrade has completed • "failed" - The upgrade did not complete

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"> • "proposed" - The upgrade is not approved and must not be performed • "scheduled" - The upgrade is approved and must be performed in the specified time window • "running" - The upgrade must be performed immediately, regardless of the time window
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"> • Minimum Items: 0

Name	Type	Required	Description
metadata	type_astra_metadata_update	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 update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

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 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">example: <code>{{.Account}}</code>
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">"application/astra-upgrade"
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none">"1.0""1.1"
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
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"> • "acc" • "acs" • "trident" • "kubernetes"
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"> • Minimum length: 3 • Maximum length: 4095
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"> • Conforms to the Astra Identifier Schema
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"> • Conforms to the SemVer Schema
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"> • Conforms to the SemVer Schema

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"> • Conforms to the Astra Identifier Schema
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"> • "unavailable" - The upgrade is not available at this time • "proposed" - The upgrade is proposed but will not automatically run until approved • "scheduled" - The upgrade is approved but is not ready to be installed due to dependencies, time windows, or available resources • "running" - The upgrade is in progress • "complete" - The upgrade has completed • "failed" - The upgrade did not complete

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"> • "proposed" - The upgrade is not approved and must not be performed • "scheduled" - The upgrade is approved and must be performed in the specified time window • "running" - The upgrade must be performed immediately, regardless of the time window
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"> • Minimum Items: 0
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"> • Conforms to the Astra Metadata Schema. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

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	additionalDetails	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[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

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">• example: <code>{{.Account}}</code>
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">• "application/astra-upgrade"
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none">• "1.0"• "1.1"

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

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"> • Conforms to the SemVer Schema
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"> • Conforms to the Astra Identifier Schema

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"> • "unavailable" - The upgrade is not available at this time • "proposed" - The upgrade is proposed but will not automatically run until approved • "scheduled" - The upgrade is approved but is not ready to be installed due to dependencies, time windows, or available resources • "running" - The upgrade is in progress • "complete" - The upgrade has completed • "failed" - The upgrade did not complete

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"> • "proposed" - The upgrade is not approved and must not be performed • "scheduled" - The upgrade is approved and must be performed in the specified time window • "running" - The upgrade must be performed immediately, regardless of the time window
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"> • Minimum Items: 0
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"> • Conforms to the Astra Metadata Schema. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

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	additionalDetails	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[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

invalidFields

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

版权信息

版权所有 © 2023 NetApp, Inc.。保留所有权利。中国印刷。未经版权所有者事先书面许可，本档中受版权保护的任何部分不得以任何形式或通过任何手段（图片、电子或机械方式，包括影印、录音、录像或存储在电子检索系统中）进行复制。

从受版权保护的 NetApp 资料派生的软件受以下许可和免责声明的约束：

本软件由 NetApp 按“原样”提供，不含任何明示或暗示担保，包括但不限于适销性以及针对特定用途的适用性的隐含担保，特此声明不承担任何责任。在任何情况下，对于因使用本软件而以任何方式造成的任何直接性、间接性、偶然性、特殊性、惩罚性或后果性损失（包括但不限于购买替代商品或服务；使用、数据或利润方面的损失；或者业务中断），无论原因如何以及基于何种责任理论，无论出于合同、严格责任或侵权行为（包括疏忽或其他行为），NetApp 均不承担责任，即使已被告知存在上述损失的可能性。

NetApp 保留在不另行通知的情况下随时对本文档所述的任何产品进行更改的权利。除非 NetApp 以书面形式明确同意，否则 NetApp 不承担因使用本文档所述产品而产生的任何责任或义务。使用或购买本产品不表示获得 NetApp 的任何专利权、商标权或任何其他知识产权许可。

本手册中描述的产品可能受一项或多项美国专利、外国专利或正在申请的专利的保护。

有限权利说明：政府使用、复制或公开本文档受 DFARS 252.227-7013（2014 年 2 月）和 FAR 52.227-19（2007 年 12 月）中“技术数据权利 — 非商用”条款第 (b)(3) 条规定的限制条件的约束。

本文档中所含数据与商业产品和/或商业服务（定义见 FAR 2.101）相关，属于 NetApp, Inc. 的专有信息。根据本协议提供的所有 NetApp 技术数据和计算机软件具有商业性质，并完全由私人出资开发。美国政府对这些数据的使用权具有非排他性、全球性、受限且不可撤销的许可，该许可既不可转让，也不可再许可，但仅限在与交付数据所依据的美国政府合同有关且受合同支持的情况下使用。除本文档规定的情形外，未经 NetApp, Inc. 事先书面批准，不得使用、披露、复制、修改、操作或显示这些数据。美国政府对国防部的授权仅限于 DFARS 的第 252.227-7015(b)（2014 年 2 月）条款中明确的权利。

商标信息

NetApp、NetApp 标识和 <http://www.netapp.com/TM> 上所列的商标是 NetApp, Inc. 的商标。其他公司和产品名称可能是其各自所有者的商标。