# **■** NetApp

# **Upgrade**

**Astra Automation** 

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# **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	Туре	In	Required	Description
account_id	string	path	True	ID of the containing account resource • 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"  • example: id,componentName,upgradeVersion

Name	Туре	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"
filter	string	query	False	Indicates which fields should be matched in order to return a resource when listing a collection.  Supported operators are:  • eq - Equality • It/gt - Less than/Greater than • Ite/gte - Less than or equals to/Greater than or equals to/Greater than or equals to  URL example: "filter=field%20eq%20%27value%27"  OpenAPI examples: "field eq 'value"

# 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	Туре	Required	Description
items	array[Any of: upgrade_1.1_get_respons e_body, array[]]	True	
metadata	type_astra_metadata_list	True	

```
"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"
}
```

```
Status: 401, Unauthorized
```

Name	Туре	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	

Name	Туре	Required	Description
correlationID	string	False	

```
"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	Туре	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"
}
```

Status: 403, Forbidden

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

type\_astra\_label

Name	Туре	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	Туре	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	Туре	Required	Description
type	string	True	Media type of the resource. Defined values are:  • "application/astra-upgrade"
version	string	True	Version of the resource. Defined values are: • "1.0" • "1.1"

Name	Туре	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are:  • 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:  • "acc"  • "acs"  • "trident"  • "kubernetes"
componentInstance	string	True	JSON string containing the URI of the component that can be upgraded. Defined values are:  • 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:  • Conforms to the Astra Identifier Schema
upgradeVersion	string	True	JSON string containing the SemVer of the software image file that can be upgraded to. Defined values are:  • Conforms to the SemVer Schema

Name	Туре	Required	Description
currentVersion	string	True	JSON string containing the current SemVer of the entity to be upgraded. Defined values are:  • Conforms to the SemVer Schema
dependencies	array[string]	True	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:  • Conforms to the Astra Identifier Schema

Name	Туре	Required	Description
state	string	True	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:
			"unavailable" - The upgrade is not available at this time
			"proposed" - The upgrade is proposed but will not automatically run until approved
			<ul> <li>"scheduled" - The upgrade is approved but is not ready to be installed due to dependencies, time windows, or available resources</li> </ul>
			"running" - The upgrade is in progress
			"complete" - The upgrade has completed
			"failed" - The     upgrade did not     complete

Туре	Required	Description
string	True	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:
		<ul> <li>"proposed" - The upgrade is not approved and must not be performed</li> </ul>
		<ul> <li>"scheduled" - The upgrade is approved and must be performed in the specified time window</li> </ul>
		<ul> <li>"running" - The upgrade must be performed immediately, regardless of the time window</li> </ul>
array[type_astra_stateDe tail]	True	JSON array of JSON objects that lists additional details about the current "state". If no details are available, this array will be empty.  • Minimum Items: 0
	string  array[type_astra_stateDe	string True  array[type_astra_stateDe True

Name	Туре	Required	Description
metadata	type_astra_metadata_up date	True	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.

# type\_astra\_metadata\_list

Name	Туре	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	Туре	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	Туре	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
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	Туре	Required	Description
type	string	True	Media type of the resource. Defined values are:  • "application/astra-upgrade"
version	string	True	Version of the resource. Defined values are:  • "1.0"  • "1.1"
id	string	True	Globally unique identifier of the resource. Defined values are:  • Conforms to the UUIDv4 Schema

Name	Туре	Required	Description
componentName	string	True	JSON string containing the name of the type of software that can be upgraded. Defined values are:  • "acc"  • "acs"  • "trident"  • "kubernetes"
componentInstance	string	True	JSON string containing the URI of the component that can be upgraded. Defined values are:  • 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:  • Conforms to the Astra Identifier Schema
upgradeVersion	string	True	JSON string containing the SemVer of the software image file that can be upgraded to. Defined values are:  • Conforms to the SemVer Schema
currentVersion	string	True	JSON string containing the current SemVer of the entity to be upgraded. Defined values are:  • Conforms to the SemVer Schema

Name	Туре	Required	Description
dependencies	array[string]	True	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:  • Conforms to the Astra Identifier Schema
state	string	True	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:  • "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	Туре	Required	Description
stateDesired	string	True	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:
			<ul> <li>"proposed" - The upgrade is not approved and must not be performed</li> </ul>
			<ul> <li>"scheduled" - The upgrade is approved and must be performed in the specified time window</li> </ul>
			<ul> <li>"running" - The upgrade must be performed immediately, regardless of the time window</li> </ul>
stateDetails	array[type_astra_stateDet ail]	True	JSON array of JSON objects that lists additional details about the current "state". If no details are available, this array will be empty.
			Minimum Items: 0
metadata	type_astra_metadata_upd ate	True	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.

```
"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"
 }
}
```

```
Status: 401, Unauthorized
```

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

```
{
  "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	Туре	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"
}
```

```
Status: 403, Forbidden
```

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

```
"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	Туре	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	Туре	Required	Description
type	string	True	
title	string	True	
detail	string	True	

type\_astra\_label

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

#### invalidParams

Name	Туре	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	Туре	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
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	Туре	Required	Description
type	string	True	Media type of the resource. Defined values are:  • "application/astra-upgrade"
version	string	True	Version of the resource. Defined values are:  • "1.0"  • "1.1"
id	string	False	Globally unique identifier of the resource. Defined values are:  • Conforms to the UUIDv4 Schema

Name	Туре	Required	Description
componentName	string	False	JSON string containing the name of the type of software that can be upgraded. Defined values are:  • "acc"  • "acs"  • "trident"  • "kubernetes"
componentInstance	string	False	JSON string containing the URI of the component that can be upgraded. Defined values are:  • 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:  • 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:  • Conforms to the SemVer Schema
currentVersion	string	False	JSON string containing the current SemVer of the entity to be upgraded. Defined values are:  • Conforms to the SemVer Schema

Name	Туре	Required	Description
dependencies	array[string]	False	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:  • Conforms to the Astra Identifier Schema
state	string	False	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:  • "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	Туре	Required	Description
stateDesired	string	False	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:  • "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 in the specified time window
			regardless of the time window
stateDetails	array[type_astra_stateDet ail]	False	JSON array of JSON objects that lists additional details about the current "state". If no details are available, this array will be empty.  • Minimum Items: 0
			• Minimum items: 0
metadata	type_astra_metadata_upd ate	False	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.

#### **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	Туре	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"
}
```

```
Status: 400, Bad request
```

Name	Туре	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

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

```
Status: 409, Conflict
```

Name	Туре	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

```
"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	Туре	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	Туре	Required	Description
type	string	True	
title	string	True	

Name	Туре	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**

#### type\_astra\_stateDetail

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

# type\_astra\_label

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

#### invalidParams

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

#### invalidFields

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

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

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