



# Certificate

## Astra Automation

NetApp  
August 11, 2025

# 目录

Certificate	1
Certificate overview	1
Create a new certificate	1
Parameters	1
Request Body	1
Response	4
Response	9
Response	10
Response	11
Response	11
Error	12
Definitions	12
List all certificates	14
Parameters	14
Response	16
Response	17
Response	18
Response	18
Response	19
Error	20
Definitions	20
Retrieve a certificate	27
Parameters	27
Response	27
Response	32
Response	33
Response	34
Response	34
Response	35
Error	35
Definitions	36
Modify a certificate	38
Parameters	38
Request Body	38
Response	42
Response	42
Response	43
Response	44
Response	44
Response	45
Error	46
Definitions	46
Delete a certificate	48

Parameters .....	48
Response .....	48
Response .....	48
Error .....	49

# Certificate

## Certificate overview

The Certificate App API represents admin-trusted certificates that are used for establishing outgoing connections.

## Create a new certificate

POST `/accounts/{account_id}/core/v1/certificates`

Indicates the desired values for the Certificate API resource to be created.

### Parameters

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

### Request Body

Indicates the desired values for the Certificate API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-certificate"</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
certUse	string	False	<p>JSON string indicating the use of the certificate. If not specified, defaults to "rootCA". Defined values are:</p> <ul style="list-style-type: none"> <li>• "rootCA" - The certificate is a certificate authority (CA) certificate used to trust any certificate signed by that CA.</li> <li>• "intermediateCA" - The certificate is an intermediate CA certificate issued by a root CA.</li> </ul>
cert	string	True	<p>JSON string containing a base64 encoded PKCS-11 formatted certificate (PEM). Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the base64 Encoded Data Schema</li> </ul>

Name	Type	Required	Description
isSelfSigned	string	False	<p>JSON string indicating whether the certificate is self-signed. If not provided on create, the value defaults to "false". On update:</p> <ul style="list-style-type: none"> <li>• If the value is provided, that value will be used.</li> <li>• If the value is not provided and the "cert" field is included in the update, the value will be set to "false".</li> <li>• If the value is not provided and the "cert" field is not included in the update, the existing value will be retained. Defined values are: <ul style="list-style-type: none"> <li>• "true" - The certificate is self-signed.</li> <li>• "false" - The certificate is not self-signed.</li> </ul> </li> </ul>
trustStateDesired	string	False	<p>JSON string containing a value indicating whether the certificate is trusted. If not specified on create, the default value is "trusted". Defined values are:</p> <ul style="list-style-type: none"> <li>• "untrusted" - The certificate is not trusted.</li> <li>• "trusted" - The certificate is marked as trusted.</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	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 create, a metadata object will be created with no labels. 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-certificate",
  "version": "1.1",
  "certUse": "rootCA",
  "cert":
  "LS0tLS1CRUdJTtBDRVJUSUZJQ0FURS0tLS0tCk1JSUZyVENDQTVXZ0F3MVJHbnFGbUJSSW
  RyV1kwPQotLS0tLUVORCBDRVJUSUZJQ0FURS0tLS0t"
}
```

### Response

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

Name	Type	Required	Description
type	string	True	<p>Media type of the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>"application/astra-certificate"</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>
certUse	string	True	JSON string indicating the use of the certificate. If not specified, defaults to "rootCA". Defined values are: <ul style="list-style-type: none"> <li>• "rootCA" - The certificate is a certificate authority (CA) certificate used to trust any certificate signed by that CA.</li> <li>• "intermediateCA" - The certificate is an intermediate CA certificate issued by a root CA.</li> </ul>
cert	string	True	JSON string containing a base64 encoded PKCS-11 formatted certificate (PEM). Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the base64 Encoded Data Schema</li> </ul>
cn	string	True	JSON string containing a common name extracted from the certificate. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 511</li> </ul>

Name	Type	Required	Description
expiryTimestamp	string	True	<p>JSON string containing a timestamp indicating when the certificate expires. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
isSelfSigned	string	True	<p>JSON string indicating whether the certificate is self-signed. If not provided on create, the value defaults to "false". On update:</p> <ul style="list-style-type: none"> <li>• If the value is provided, that value will be used.</li> <li>• If the value is not provided and the "cert" field is included in the update, the value will be set to "false".</li> <li>• If the value is not provided and the "cert" field is not included in the update, the existing value will be retained. Defined values are:</li> <li>• "true" - The certificate is self-signed.</li> <li>• "false" - The certificate is not self-signed.</li> </ul>

Name	Type	Required	Description
trustState	string	True	<p>JSON string containing one of a set of enumerated values indicating whether the certificate is trusted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "untrusted" - The certificate is not trusted.</li> <li>• "trusted" - The certificate is marked as trusted.</li> <li>• "expired" - The certificate is expired, so is neither trusted or not trusted.</li> </ul>
trustStateTransitions	array[ <a href="#">type_astra_stateTransition</a> ]	True	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state. Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state, and the "to" value is an array of permitted destination states.</p>
trustStateDesired	string	False	<p>JSON string containing a value indicating whether the certificate is trusted. If not specified on create, the default value is "trusted". Defined values are:</p> <ul style="list-style-type: none"> <li>• "untrusted" - The certificate is not trusted.</li> <li>• "trusted" - The certificate is marked as trusted.</li> </ul>

Name	Type	Required	Description
trustStateDetails	array[type_astra_stateDetail]	True	<p>JSON array of JSON objects that lists additional details about the trust state of the certificate. 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 create, a metadata object will be created with no labels. 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-certificate",
  "version": "1.1",
  "id": "a26cbcd4-2183-58ce-aa19-e37ca8b0531a",
  "certUse": "rootCA",
  "cert":
  "LS0tLS1CRUdJTtBDRVJUSUZJQ0FURStLS0tCk1JSUZyVENDQTVXZ0F3MVJHbnFGbUJSSW
  RyV1kwPQotLS0tLUVORCBDRVJUSUZJQ0FURStLS0t",
  "cn": "vcenter.example.com",
  "isSelfSigned": "false",
  "expiryTimestamp": "2022-03-23T16:48:38.5233461Z",
  "trustState": "trusted",
  "trustStateTransitions": [
    {
      "from": "untrusted",
      "to": [
        "trusted"
      ]
    },
    {
      "from": "trusted",
      "to": [
        "untrusted"
      ]
    }
  ],
  "trustStateDesired": "trusted",
  "trustStateDetails": [],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## 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/7",
  "title": "Invalid JSON payload",
  "detail": "The request body is not valid JSON.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

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

### Example response

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

### Response

Status: 500, Internal server error

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/34",
  "title": "Internal server error",
  "detail": "The server was unable to process this request.",
  "status": "500"
}
```

### Response

Status: 503, Service unavailable

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

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/41",
  "title": "Service not ready",
  "detail": "Currently, the service can't respond to this request.",
  "status": "503"
}
```

### Error

Status: 401, Unauthorized

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/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Definitions

## See Definitions

### 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 create, a metadata object will be created with no labels. 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	

### type\_astra\_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetail

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

### invalidFields

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

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

## List all certificates

GET /accounts/{account\_id}/core/v1/certificates

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: <code>{{.Account}}</code></li> </ul>
continue		query	False	Indicates the token to resume listing from. <p>URL examples:</p> <pre>"continue=&lt;continue token="" from="" collection="" metadata=""&gt;"&lt;/continue&gt;</pre> <p>OpenAPI examples:</p> <pre>"&lt;continue token="" from="" collection="" metadata=""&gt;"&lt;/continue&gt;&amp;lt;/continue&amp;gt;</pre>

Name	Type	In	Required	Description
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> <ul style="list-style-type: none"> <li>• example: certUse%20eq%20'rootCA'</li> </ul>
include	string	query	False	<p>Indicates which fields should be returned when listing a collection.</p> <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p> <ul style="list-style-type: none"> <li>• example: id,cn,isSelfSigned</li> </ul>

Name	Type	In	Required	Description
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"
orderBy	string	query	False	Indicates the sort order of resource when listing a collection.  URL examples: "orderBy=name", "orderBy=name%20desc"  OpenAPI examples: "name desc"

## 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[ <a href="#">Any of: certificate_1.1_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-certificates",
  "version": "1.1",
  "items": [
    [
      "f97f3441-075e-4f9b-9d1e-47f9f62a3fc4",
      "prod.region-1.example.com",
      "true"
    ],
    [
      "5e365b4d-034f-4f13-95ef-d3a7fbc0df3d",
      "prod.region-2.example.com",
      "false"
    ],
    [
      "11ceb350-1999-4b79-80a6-46a980a27856",
      "prod.example.com",
      "false"
    ]
  ],
  "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: 503, Service unavailable

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/41",
  "title": "Service not ready",
  "detail": "Currently, the service can't respond to this request.",
  "status": "503"
}
```

### Response

Status: 409, Conflict

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

### Example response

```
{
  "type": "https://astra.netapp.io/problems/164",
  "title": "Requested resource in unexpected state",
  "detail": "The requested resource can't be returned because it isn't in the expected state. Wait for the conflict to be resolved and retry the request.",
  "status": "409"
}
```

## Error

Status: 404, Not found

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

### Example error response

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

## Definitions

## See Definitions

### type\_astra\_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetail

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

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

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

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

### certificate\_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-certificate"</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>
certUse	string	True	JSON string indicating the use of the certificate. If not specified, defaults to "rootCA". Defined values are: <ul style="list-style-type: none"> <li>"rootCA" - The certificate is a certificate authority (CA) certificate used to trust any certificate signed by that CA.</li> <li>"intermediateCA" - The certificate is an intermediate CA certificate issued by a root CA.</li> </ul>
cert	string	True	JSON string containing a base64 encoded PKCS-11 formatted certificate (PEM). Defined values are: <ul style="list-style-type: none"> <li>Conforms to the base64 Encoded Data Schema</li> </ul>

Name	Type	Required	Description
cn	string	True	JSON string containing a common name extracted from the certificate. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 511</li></ul>
expiryTimestamp	string	True	JSON string containing a timestamp indicating when the certificate expires. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the ISO-8601 Date Time Schema</li></ul>

Name	Type	Required	Description
isSelfSigned	string	True	<p>JSON string indicating whether the certificate is self-signed. If not provided on create, the value defaults to "false". On update:</p> <ul style="list-style-type: none"> <li>• If the value is provided, that value will be used.</li> <li>• If the value is not provided and the "cert" field is included in the update, the value will be set to "false".</li> <li>• If the value is not provided and the "cert" field is not included in the update, the existing value will be retained. Defined values are: <ul style="list-style-type: none"> <li>• "true" - The certificate is self-signed.</li> <li>• "false" - The certificate is not self-signed.</li> </ul> </li> </ul>
trustState	string	True	<p>JSON string containing one of a set of enumerated values indicating whether the certificate is trusted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "untrusted" - The certificate is not trusted.</li> <li>• "trusted" - The certificate is marked as trusted.</li> <li>• "expired" - The certificate is expired, so is neither trusted or not trusted.</li> </ul>

Name	Type	Required	Description
trustStateTransitions	array[type_astra_stateTransition]	True	JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state. Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state, and the "to" value is an array of permitted destination states.
trustStateDesired	string	False	JSON string containing a value indicating whether the certificate is trusted. If not specified on create, the default value is "trusted". Defined values are: <ul style="list-style-type: none"> <li>"untrusted" - The certificate is not trusted.</li> <li>"trusted" - The certificate is marked as trusted.</li> </ul>
trustStateDetails	array[type_astra_stateDetail]	True	JSON array of JSON objects that lists additional details about the trust state of the certificate. If no details are available, this array will be empty. <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	<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 create, a metadata object will be created with no labels. 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 a certificate

GET /accounts/{account\_id}/core/v1/certificates/{certificate\_id}

Returns the stored Certificate 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: {{.Account}}</li></ul>
certificate_id	string	path	True	ID of the certificate collection to list

## Response

Status: 200, Returns the stored Certificate 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-certificate"</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
certUse	string	True	<p>JSON string indicating the use of the certificate. If not specified, defaults to "rootCA". Defined values are:</p> <ul style="list-style-type: none"> <li>• "rootCA" - The certificate is a certificate authority (CA) certificate used to trust any certificate signed by that CA.</li> <li>• "intermediateCA" - The certificate is an intermediate CA certificate issued by a root CA.</li> </ul>
cert	string	True	<p>JSON string containing a base64 encoded PKCS-11 formatted certificate (PEM). Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the base64 Encoded Data Schema</li> </ul>
cn	string	True	<p>JSON string containing a common name extracted from the certificate. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 511</li> </ul>
expiryTimestamp	string	True	<p>JSON string containing a timestamp indicating when the certificate expires. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

Name	Type	Required	Description
isSelfSigned	string	True	<p>JSON string indicating whether the certificate is self-signed. If not provided on create, the value defaults to "false". On update:</p> <ul style="list-style-type: none"> <li>• If the value is provided, that value will be used.</li> <li>• If the value is not provided and the "cert" field is included in the update, the value will be set to "false".</li> <li>• If the value is not provided and the "cert" field is not included in the update, the existing value will be retained. Defined values are: <ul style="list-style-type: none"> <li>• "true" - The certificate is self-signed.</li> <li>• "false" - The certificate is not self-signed.</li> </ul> </li> </ul>
trustState	string	True	<p>JSON string containing one of a set of enumerated values indicating whether the certificate is trusted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "untrusted" - The certificate is not trusted.</li> <li>• "trusted" - The certificate is marked as trusted.</li> <li>• "expired" - The certificate is expired, so is neither trusted or not trusted.</li> </ul>

Name	Type	Required	Description
trustStateTransitions	array[ <a href="#">type_astra_stateTransition</a> ]	True	JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state. Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state, and the "to" value is an array of permitted destination states.
trustStateDesired	string	False	<p>JSON string containing a value indicating whether the certificate is trusted. If not specified on create, the default value is "trusted". Defined values are:</p> <ul style="list-style-type: none"> <li>• "untrusted" - The certificate is not trusted.</li> <li>• "trusted" - The certificate is marked as trusted.</li> </ul>
trustStateDetails	array[ <a href="#">type_astra_stateDetail</a> ]	True	<p>JSON array of JSON objects that lists additional details about the trust state of the certificate. 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	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 create, a metadata object will be created with no labels. 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-certificate",
  "version": "1.1",
  "id": "a26cbcd4-2183-58ce-aa19-e37ca8b0531a",
  "certUse": "rootCA",
  "cert":
  "LS0tLS1CRUdJTtIBDRVJUSUZJQ0FURSOtLS0tCk1JSUZyVENDQTVXZ0F3MVJHbnFGbUJSSW
  RyV1kwPQotLS0tLUVORCBDRVJUSUZJQ0FURSOtLS0t",
  "cn": "vcenter.example.com",
  "expiryTimestamp": "2022-03-23T16:48:38.5233461Z",
  "isSelfSigned": "true",
  "trustState": "untrusted",
  "trustStateTransitions": [
    {
      "from": "untrusted",
      "to": [
        "trusted"
      ]
    },
    {
      "from": "trusted",
      "to": [
        "untrusted"
      ]
    }
  ],
  "trustStateDetails": [],
  "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"
}
```

### Response

Status: 503, Service unavailable

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

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/41",
  "title": "Service not ready",
  "detail": "Currently, the service can't respond to this request.",
  "status": "503"
}
```

### Response

Status: 409, Conflict

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

### Example response

```
{
  "type": "https://astra.netapp.io/problems/164",
  "title": "Requested resource in unexpected state",
  "detail": "The requested resource can't be returned because it isn't in the expected state. Wait for the conflict to be resolved and retry the request.",
  "status": "409"
}
```

### Error

Status: 404, Not found

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

### Example error response

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

### Definitions

## See Definitions

### type\_astra\_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetail

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

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

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

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

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

## Modify a certificate

PUT /accounts/{account\_id}/core/v1/certificates/{certificate\_id}

Replaces the entire stored resource with the supplied JSON request body.

### Side Effects

- An updated CA certificate will be updated in the trust store.
- If an existing trusted CA certificate becomes untrusted, it will be removed from the trust store.
- If a certificate body is updated ("cert" field), the "isSelfSigned" indicator must be included to indicate the state of the new certificate. If the "isSelfSigned" indicator is not included in this case, the value will be set to "false".
- If an update does not modify the certificate body ("cert" field), the "isSelfSigned" indicator is optional and the existing value will be retained if not provided.

### Parameters

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

### Request Body

Replaces the entire stored resource with the supplied JSON request body.

### Side Effects

- An updated CA certificate will be updated in the trust store.
- If an existing trusted CA certificate becomes untrusted, it will be removed from the trust store.
- If a certificate body is updated ("cert" field), the "isSelfSigned" indicator must be included to indicate the state of the new certificate. If the "isSelfSigned" indicator is not included in this case, the value will be set to "false".
- If an update does not modify the certificate body ("cert" field), the "isSelfSigned" indicator is optional and the existing value will be retained if not provided.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-certificate"</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	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
certUse	string	False	JSON string indicating the use of the certificate. If not specified, defaults to "rootCA". Defined values are: <ul style="list-style-type: none"> <li>• "rootCA" - The certificate is a certificate authority (CA) certificate used to trust any certificate signed by that CA.</li> <li>• "intermediateCA" - The certificate is an intermediate CA certificate issued by a root CA.</li> </ul>
cert	string	False	JSON string containing a base64 encoded PKCS-11 formatted certificate (PEM). Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the base64 Encoded Data Schema</li> </ul>

Name	Type	Required	Description
cn	string	False	<p>JSON string containing a common name extracted from the certificate.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 511</li> </ul>
expiryTimestamp	string	False	<p>JSON string containing a timestamp indicating when the certificate expires. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
isSelfSigned	string	False	<p>JSON string indicating whether the certificate is self-signed. If not provided on create, the value defaults to "false". On update:</p> <ul style="list-style-type: none"> <li>• If the value is provided, that value will be used.</li> <li>• If the value is not provided and the "cert" field is included in the update, the value will be set to "false".</li> <li>• If the value is not provided and the "cert" field is not included in the update, the existing value will be retained.</li> </ul> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The certificate is self-signed.</li> <li>• "false" - The certificate is not self-signed.</li> </ul>

Name	Type	Required	Description
trustState	string	False	<p>JSON string containing one of a set of enumerated values indicating whether the certificate is trusted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "untrusted" - The certificate is not trusted.</li> <li>• "trusted" - The certificate is marked as trusted.</li> <li>• "expired" - The certificate is expired, so is neither trusted or not trusted.</li> </ul>
trustStateTransitions	array[ <a href="#">type_astra_stateTransition</a> ]	False	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state. Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state, and the "to" value is an array of permitted destination states.</p>
trustStateDesired	string	False	<p>JSON string containing a value indicating whether the certificate is trusted. If not specified on create, the default value is "trusted". Defined values are:</p> <ul style="list-style-type: none"> <li>• "untrusted" - The certificate is not trusted.</li> <li>• "trusted" - The certificate is marked as trusted.</li> </ul>

Name	Type	Required	Description
trustStateDetails	array[type_astra_stateDetail]	False	<p>JSON array of JSON objects that lists additional details about the trust state of the certificate. 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 create, a metadata object will be created with no labels. 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-certificate",
  "version": "1.1",
  "trustStateDesired": "trusted"
}
```

### Response

Status: 204, Indicates if the certificate 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"
}
```

### Response

Status: 503, Service unavailable

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/41",
  "title": "Service not ready",
  "detail": "Currently, the service can't respond to this request.",
  "status": "503"
}
```

## Error

Status: 404, Not found

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

### Example error response

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

## Definitions

## See Definitions

### type\_astra\_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetail

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

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

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

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

Name	Type	Required	Description
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

## Delete a certificate

DELETE /accounts/{account\_id}/core/v1/certificates/{certificate\_id}

Removes the specified Certificate API resource.

### 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>
certificate_id	string	path	True	ID of the certificate collection to list

### Response

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

### Response

Status: 503, Service unavailable

Name	Type	Required	Description
type	string	True	

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

### Example response

```
{
  "type": "https://astra.netapp.io/problems/41",
  "title": "Service not ready",
  "detail": "Currently, the service can't respond to this request.",
  "status": "503"
}
```

### Error

Status: 403, Forbidden

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/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## 版权信息

版权所有 © 2025 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。