



## **Credential**

### Astra Automation

NetApp  
December 01, 2023

# Sommario

- Credential ..... 1
  - Credential overview ..... 1
  - Create a new credential ..... 1
  - List all credentials ..... 14
  - Retrieve a credential ..... 25
  - Modify a credential ..... 33
  - Delete a credential ..... 43

# Credential

## Credential overview

The Credential API provides CRUD (Create-Read-Update-Delete) access to credential resources to securely persist objects containing sensitive information.

## Create a new credential

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

Indicates the desired values for the Credential 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 Credential 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-credential"</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
name	string	True	<p>JSON string containing a user-specified name. When a credential is created for a user, the name will be set to the UUID of that user. Defined values are:</p> <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 127</li></ul>

Name	Type	Required	Description
keyType	string	False	<p>JSON string containing an optional user-specified data validation type descriptor for the contents of the keyStore. Extended update constraints:</p> <ul style="list-style-type: none"> <li>• If a keyType does not exist in the resource and is not specified in an update, the keyType must not continue to exist in the updated resource.</li> <li>• If a keyType does not exist in the resource and is specified in an update, the keyType must be added to the resource and validation must be performed. If the validation fails, the update will fail.</li> <li>• If a keyType exists in the resource and is not specified in an update, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified matches the existing keyType, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified is different from the existing keyType, the update will fail. Defined values are:</li> <li>• "generic" - The credential is a generic collection of data. This is equivalent to not including a keyType.</li> </ul> <p>Extended validation is performed as follows: 3</p>

Name	Type	Required	Description
keyStore	keyStore	True	<p>JSON object containing JSON strings. Each string in the keyStore represents part of the credential. The name of each string represents the credential part, and the corresponding key-value stores the value of that part of the credential in base64 format. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the base64 Encoded Data Schema No limits are placed on the lengths of the strings.</li> </ul>
valid	string	False	<p>JSON string describing whether the credential is valid for use. Default value, if omitted, is "true". Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The credential is eligible for use.</li> <li>• "false" - The credential must not be used.</li> </ul>
validFromTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is valid. These are used for credential rotation. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

- The password is stored as a hash.
- A "change" string must exist within the keyStore with a value containing a base64-encoded string "true" or "false".
- A credential of type passwordHash can only be deleted if the user ID indicated by the name does not

Name	Type	Required	Description
validUntilTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is no longer valid. These are used for credential rotation. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</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

- "certificate" - The credential is a PEM-

```

{
  "type": "application/astra-credential",
  "version": "1.1",
  "name": "myCert",
  "keyStore": {
    "privKey": "SGkh",
    "pubKey": "VGhpcyBpcyBhbiBleGFtcGxlLg=="
  }
}

```

- Extended validation is performed as follows:
- A "privkey" string must exist within the keyStore, with a value containing a base64- 5 encoded PEM private

## Response

Status: 201, Returns the newly created credential 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-credential"</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	string	True	JSON string containing a user-specified name. When a credential is created for a user, the name will be set to the UUID of that user. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 127</li></ul>



Name	Type	Required	Description
keyType	string	False	<p>JSON string containing an optional user-specified data validation type descriptor for the contents of the keyStore. Extended update constraints:</p> <ul style="list-style-type: none"> <li>• If a keyType does not exist in the resource and is not specified in an update, the keyType must not continue to exist in the updated resource.</li> <li>• If a keyType does not exist in the resource and is specified in an update, the keyType must be added to the resource and validation must be performed. If the validation fails, the update will fail.</li> <li>• If a keyType exists in the resource and is not specified in an update, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified matches the existing keyType, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified is different from the existing keyType, the update will fail. Defined values are:</li> <li>• "generic" - The credential is a generic collection of data. This is equivalent to not including a keyType.</li> </ul> <p>Extended validation is performed as follows: 7</p>

Name	Type	Required	Description
valid	string	True	<p>JSON string describing whether the credential is valid for use. Default value, if omitted, is "true". Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The credential is eligible for use.</li> <li>• "false" - The credential must not be used.</li> </ul>
validFromTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is valid. These are used for credential rotation. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
validUntilTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is no longer valid. These are used for credential rotation. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

password.

- The password cleartext must conform to the account's password policy.
- The password is stored as a hash.
- A "change" string must exist within the keyStore with a value containing a base64-encoded string "true" or "false".
- A credential of type passwordHash can only be deleted if the user ID indicated by the name does not

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-credential",
  "version": "1.1",
  "id": "58e26f6a-a631-5122-8e0e-7afe306675c0",
  "name": "myCert",
  "valid": "true",
  "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	

keyStore, with a value containing a base64-encoded PEM certificate.

encoded private key.

keyStore, with a value containing a base64-encoded PEM private

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

Service (S3) access.

### Example response

- Extended validation is

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

with a value containing a base64-encoded S3 access

### Response

Status: 400, Bad request

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

### keyStore

JSON object containing JSON strings. Each string in the keyStore represents part of the credential. The name of each string represents the credential part, and the corresponding key-value stores the value of that part of the credential in base64 format. Defined values are:

- Conforms to the base64 Encoded Data Schema No limits are placed on the lengths of the strings.

Hash mapping strings to string

### 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
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

## List all credentials

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

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>
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,name</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: credential_1.1_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-credentials",
  "version": "1.1",
  "items": [
    [
      "f97f3441-075e-4f9b-9d1e-47f9f62a3fc4",
      "myCert"
    ],
    [
      "5e365b4d-034f-4f13-95ef-d3a7fbc0df3d",
      "kubeconfig"
    ],
    [
      "11ceb350-1999-4b79-80a6-46a980a27856",
      "password"
    ]
  ],
  "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	False	
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	False	
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"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
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\_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	

### credential\_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-credential"</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
name	string	True	<p>JSON string containing a user-specified name. When a credential is created for a user, the name will be set to the UUID of that user.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 127</li></ul>

Name	Type	Required	Description
keyType	string	False	<p>JSON string containing an optional user-specified data validation type descriptor for the contents of the keyStore. Extended update constraints:</p> <ul style="list-style-type: none"> <li>• If a keyType does not exist in the resource and is not specified in an update, the keyType must not continue to exist in the updated resource.</li> <li>• If a keyType does not exist in the resource and is specified in an update, the keyType must be added to the resource and validation must be performed. If the validation fails, the update will fail.</li> <li>• If a keyType exists in the resource and is not specified in an update, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified matches the existing keyType, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified is different from the existing keyType, the update will fail.</li> </ul> <p>Defined values are:</p> <p>"generic" - The credential is a generic collection of data. This is</p>



Name	Type	Required	Description
valid	string	True	<p>JSON string describing whether the credential is valid for use. Default value, if omitted, is "true". Defined values are:</p> <ul style="list-style-type: none"> <li>"true" - The credential is eligible for use.</li> <li>"false" - The credential must not be used.</li> </ul>
validFromTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is valid. These are used for credential rotation. Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the ISO-8601 Date Time Schema</li> </ul>
validUntilTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is no longer valid. These are used for credential rotation. Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the ISO-8601 Date Time Schema</li> </ul>

must exist within the keyStore with a value containing a base64-encoded cleartext password:

- The password cleartext must conform to the account's password policy.
- The password is stored as a hash.
- A "change" string must exist within the keyStore with a value containing a

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema. If not specified on 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	<a href="#">array[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

- Extended validation is performed as follows:
- A "certificate" string must exist within the keyStore, with a value containing a base64-encoded

# Retrieve a credential

GET /accounts/{account\_id}/core/v1/credentials/{credential\_id}

Returns the stored Credential 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>
credential_id	string	path	True	ID of the credential collection to list

## Response

Status: 200, Returns the stored Credential 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-credential"</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
name	string	True	<p>JSON string containing a user-specified name. When a credential is created for a user, the name will be set to the UUID of that user. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

value containing a base64-encoded PEM private key.

- "s3" - Indicates the credentials are for Simple Storage Service (S3) access.
- Extended validation is performed as follows:
  - An "accessKey" string must exist within the keyStore with a value containing a base64-encoded S3 access key.
  - An "accessSecret" string must exist within the keyStore with a value containing a base64-encoded S3 access secret.

Name	Type	Required	Description
keyType	string	False	<p>JSON string containing an optional user-specified data validation type descriptor for the contents of the keyStore. Extended update constraints:</p> <ul style="list-style-type: none"> <li>• If a keyType does not exist in the resource and is not specified in an update, the keyType must not continue to exist in the updated resource.</li> <li>• If a keyType does not exist in the resource and is specified in an update, the keyType must be added to the resource and validation must be performed. If the validation fails, the update will fail.</li> <li>• If a keyType exists in the resource and is not specified in an update, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified matches the existing keyType, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified is different from the existing keyType, the update will fail. Defined values are:</li> <li>• "generic" - The credential is a generic collection of data. This is equivalent to not including a keyType.</li> </ul> <p>Extended validation is performed as follows?</p>

Name	Type	Required	Description
valid	string	True	<p>JSON string describing whether the credential is valid for use. Default value, if omitted, is "true". Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The credential is eligible for use.</li> <li>• "false" - The credential must not be used.</li> </ul>
validFromTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is valid. These are used for credential rotation. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
validUntilTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is no longer valid. These are used for credential rotation. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

password.

- The password cleartext must conform to the account's password policy.
- The password is stored as a hash.
- A "change" string must exist within the keyStore with a value containing a base64-encoded string "true" or "false".
- A credential of type passwordHash can only be deleted if the user ID indicated by the name does not

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-credential",
  "version": "1.1",
  "id": "58e26f6a-a631-5122-8e0e-7afe306675c0",
  "name": "myCert",
  "valid": "true",
  "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	

keyStore, with a value containing a base64-encoded PEM certificate.

encoded private key.

keyStore, with a value containing a base64-encoded PEM private

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

Service (S3) access.

### Example response

- Extended validation is

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

with a value containing a base64-encoded S3 access

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
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	False	
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	False	
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\_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	

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 a credential

PUT /accounts/{account\_id}/core/v1/credentials/{credential\_id}

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

## 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>
credential_id	string	path	True	ID of the credential collection to list

## Request Body

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

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-credential"</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>
name	string	False	JSON string containing a user-specified name. When a credential is created for a user, the name will be set to the UUID of that user. Defined values are: <ul style="list-style-type: none"> <li>Minimum length: 1</li> <li>Maximum length: 127</li> </ul>

Name	Type	Required	Description
keyType	string	False	<p>JSON string containing an optional user-specified data validation type descriptor for the contents of the keyStore. Extended update constraints:</p> <ul style="list-style-type: none"> <li>• If a keyType does not exist in the resource and is not specified in an update, the keyType must not continue to exist in the updated resource.</li> <li>• If a keyType does not exist in the resource and is specified in an update, the keyType must be added to the resource and validation must be performed. If the validation fails, the update will fail.</li> <li>• If a keyType exists in the resource and is not specified in an update, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified matches the existing keyType, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified is different from the existing keyType, the update will fail. Defined values are:</li> <li>• "generic" - The credential is a generic collection of data. This is equivalent to not including a keyType.</li> </ul> <p>Extended validation is performed as follows<sup>35</sup></p>

Name	Type	Required	Description
keyStore	keyStore	False	<p>JSON object containing JSON strings. Each string in the keyStore represents part of the credential. The name of each string represents the credential part, and the corresponding key-value stores the value of that part of the credential in base64 format. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the base64 Encoded Data Schema No limits are placed on the lengths of the strings.</li> </ul>
valid	string	False	<p>JSON string describing whether the credential is valid for use. Default value, if omitted, is "true". Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The credential is eligible for use.</li> <li>• "false" - The credential must not be used.</li> </ul>
validFromTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is valid. These are used for credential rotation. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

- The password is stored as a hash.
- A "change" string must exist within the keyStore with a value containing a base64-encoded string "true" or "false".
- A credential of type passwordHash can only be deleted if the user ID indicated by the name does not

Name	Type	Required	Description
validUntilTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is no longer valid. These are used for credential rotation. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</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

- "certificate" - The credential is a PEM-

```
{
  "type": "application/astra-credential",
  "version": "1.1",
  "name": "oldCert",
  "keyStore": {
    "privKey": "SGkh",
    "pubKey": "VGhpcyBpcyBhbiBleGFtcGxlLg=="
  }
}
```

- Extended validation is performed as follows:
- A "privkey" string must exist within the keyStore, with a value containing a base64-<sub>37</sub> encoded PEM private

## Response

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

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
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	False	
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"
}
```

keyStore with a value containing a base64-encoded S3 access

### Response

Status: 409, Conflict

string must exist within the keyStore

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

### keyStore

JSON object containing JSON strings. Each string in the keyStore represents part of the credential. The name of each string represents the credential part, and the corresponding key-value stores the value of that part of the credential in base64 format. Defined values are:

- Conforms to the base64 Encoded Data Schema No limits are placed on the lengths of the strings.

Hash mapping strings to string

### 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	

### 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

## Delete a credential

DELETE /accounts/{account\_id}/core/v1/credentials/{credential\_id}

Removes the specified Credential API resource.

### Side Effects

- If the credential being deleted is relied on by another resource or API, the deletion might cause unintended side effects within other APIs or the system as a whole.

### 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>
credential_id	string	path	True	ID of the credential collection to list

### Response

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

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
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	False	
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	False	
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	False	
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

invalidParams

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



## Informazioni sul copyright

Copyright © 2023 NetApp, Inc. Tutti i diritti riservati. Stampato negli Stati Uniti d'America. Nessuna porzione di questo documento soggetta a copyright può essere riprodotta in qualsiasi formato o mezzo (grafico, elettronico o meccanico, inclusi fotocopie, registrazione, nastri o storage in un sistema elettronico) senza previo consenso scritto da parte del detentore del copyright.

Il software derivato dal materiale sottoposto a copyright di NetApp è soggetto alla seguente licenza e dichiarazione di non responsabilità:

IL PRESENTE SOFTWARE VIENE FORNITO DA NETAPP "COSÌ COM'È" E SENZA QUALSIVOGLIA TIPO DI GARANZIA IMPLICITA O ESPRESSA FRA CUI, A TITOLO ESEMPLIFICATIVO E NON ESAUSTIVO, GARANZIE IMPLICITE DI COMMERCIALIZZABILITÀ E IDONEITÀ PER UNO SCOPO SPECIFICO, CHE VENGONO DECLINATE DAL PRESENTE DOCUMENTO. NETAPP NON VERRÀ CONSIDERATA RESPONSABILE IN ALCUN CASO PER QUALSIVOGLIA DANNO DIRETTO, INDIRETTO, ACCIDENTALE, SPECIALE, ESEMPLARE E CONSEGUENZIALE (COMPRESI, A TITOLO ESEMPLIFICATIVO E NON ESAUSTIVO, PROCUREMENT O SOSTITUZIONE DI MERCI O SERVIZI, IMPOSSIBILITÀ DI UTILIZZO O PERDITA DI DATI O PROFITTI OPPURE INTERRUZIONE DELL'ATTIVITÀ AZIENDALE) CAUSATO IN QUALSIVOGLIA MODO O IN RELAZIONE A QUALUNQUE TEORIA DI RESPONSABILITÀ, SIA ESSA CONTRATTUALE, RIGOROSA O DOVUTA A INSOLVENZA (COMPRESA LA NEGLIGENZA O ALTRO) INSORTA IN QUALSIASI MODO ATTRAVERSO L'UTILIZZO DEL PRESENTE SOFTWARE ANCHE IN PRESENZA DI UN PREAVVISO CIRCA L'EVENTUALITÀ DI QUESTO TIPO DI DANNI.

NetApp si riserva il diritto di modificare in qualsiasi momento qualunque prodotto descritto nel presente documento senza fornire alcun preavviso. NetApp non si assume alcuna responsabilità circa l'utilizzo dei prodotti o materiali descritti nel presente documento, con l'eccezione di quanto concordato espressamente e per iscritto da NetApp. L'utilizzo o l'acquisto del presente prodotto non comporta il rilascio di una licenza nell'ambito di un qualche diritto di brevetto, marchio commerciale o altro diritto di proprietà intellettuale di NetApp.

Il prodotto descritto in questa guida può essere protetto da uno o più brevetti degli Stati Uniti, esteri o in attesa di approvazione.

LEGENDA PER I DIRITTI SOTTOPOSTI A LIMITAZIONE: l'utilizzo, la duplicazione o la divulgazione da parte degli enti governativi sono soggetti alle limitazioni indicate nel sottoparagrafo (b)(3) della clausola Rights in Technical Data and Computer Software del DFARS 252.227-7013 (FEB 2014) e FAR 52.227-19 (DIC 2007).

I dati contenuti nel presente documento riguardano un articolo commerciale (secondo la definizione data in FAR 2.101) e sono di proprietà di NetApp, Inc. Tutti i dati tecnici e il software NetApp forniti secondo i termini del presente Contratto sono articoli aventi natura commerciale, sviluppati con finanziamenti esclusivamente privati. Il governo statunitense ha una licenza irrevocabile limitata, non esclusiva, non trasferibile, non cedibile, mondiale, per l'utilizzo dei Dati esclusivamente in connessione con e a supporto di un contratto governativo statunitense in base al quale i Dati sono distribuiti. Con la sola esclusione di quanto indicato nel presente documento, i Dati non possono essere utilizzati, divulgati, riprodotti, modificati, visualizzati o mostrati senza la previa approvazione scritta di NetApp, Inc. I diritti di licenza del governo degli Stati Uniti per il Dipartimento della Difesa sono limitati ai diritti identificati nella clausola DFARS 252.227-7015(b) (FEB 2014).

## Informazioni sul marchio commerciale

NETAPP, il logo NETAPP e i marchi elencati alla pagina <http://www.netapp.com/TM> sono marchi di NetApp, Inc. Gli altri nomi di aziende e prodotti potrebbero essere marchi dei rispettivi proprietari.