



## Credential

### Astra Automation

NetApp  
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# Credential

## Credential overview

The Credential API provides access 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:<br/>{{.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: <ul style="list-style-type: none"> <li>• "generic" - The credential is a generic collection of data. This is equivalent to not including a keyType.</li> </ul> </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 | True     |             |
| 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               | True     |                                     |
| status        | string               | True     |                                     |
| correlationID | string               | False    |                                     |
| invalidFields | array[invalidFields] | False    | List of invalid request body fields |

### Example response

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

## Response

Status: 409, Conflict

| Name          | Type                 | Required | Description                         |
|---------------|----------------------|----------|-------------------------------------|
| type          | string               | True     |                                     |
| title         | string               | True     |                                     |
| detail        | string               | True     |                                     |
| status        | string               | True     |                                     |
| correlationID | string               | False    |                                     |
| invalidFields | array[invalidFields] | False    | List of invalid request body fields |

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

## Response

Status: 403, Forbidden

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

## Example response

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

## Error

Status: 404, Not found

| Name          | Type   | Required | Description |
|---------------|--------|----------|-------------|
| type          | string | True     |             |
| title         | string | True     |             |
| 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

### 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 |

## 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:<br/>"filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples:<br/>"field eq 'value'"</p> |
| include | string | query | False    | <p>Indicates which fields should be returned when listing a collection.</p> <p>URL examples:<br/>"include=id",<br/>"include=id,name"</p> <p>OpenAPI examples:<br/>"id"</p> <ul style="list-style-type: none"> <li>• example:<br/>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.<br><br>URL examples:<br>"limit=2"<br><br>OpenAPI examples:<br>"2"                         |
| orderBy | string | query | False    | Indicates the sort order of resource when listing a collection.<br><br>URL examples:<br>"orderBy=name",<br>"orderBy=name%20desc"<br><br>OpenAPI examples:<br>"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, array[]</a> ] | 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 | 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"
}
```

### 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\_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                | 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 |

- 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<br><ul style="list-style-type: none"><li>example:<br/>{{.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:<br><ul style="list-style-type: none"><li>"application/astra-credential"</li></ul>                |
| version | string | True     | Version of the resource. Defined values are:<br><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:<br><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: <ul style="list-style-type: none"> <li>• "generic" - The credential is a generic collection of data. This is equivalent to not including a keyType.</li> </ul> </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     |             |

encoded private key.

keyStore, with a value containing a base64-29 encoded PEM private

| Name          | Type   | Required | Description |
|---------------|--------|----------|-------------|
| detail        | string | True     |             |
| 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               | True     |                                  |
| status        | string               | True     |                                  |
| correlationID | string               | False    |                                  |
| invalidParams | array[invalidParams] | False    | List of invalid query parameters |

### Example response

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

## Response

Status: 403, Forbidden

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

### Example response

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

## Error

Status: 404, Not found

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

## Example error response

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

## Definitions

## See Definitions

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 | 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: <ul style="list-style-type: none"> <li>• "generic" - The credential is a generic collection of data. This is equivalent to not including a keyType.</li> </ul> </li> </ul> <p>Extended validation is performed as follows<sup>35</sup></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": "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: 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: 406, Not acceptable

| 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/32",
  "title": "Unsupported content type",
  "detail": "The response can't be returned in the requested format.",
  "status": "406"
}
```

keyStore with a value containing a base64-encoded S3 access

## Response

Status: 500, Internal server error

string must exist within the keyStore

| 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: 412, Precondition failed

| 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/38",
  "title": "Precondition not met",
  "detail": "The conditional headers aren't satisfied.",
  "status": "412"
}
```

### 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/39",
  "title": "Credential exists",
  "detail": "A credential of this type already exists.",
  "status": "409"
}
```

### Response

Status: 502, Bad gateway

| 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/40",
  "title": "Communication failed",
  "detail": "Communication wasn't made with downstream services.",
  "status": "502"
}
```

### 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: 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 error response

```
{
  "type": "https://astra.netapp.io/problems/7",
  "title": "Invalid JSON payload",
  "detail": "The request body is not valid JSON.",
  "status": "400"
}
```

## 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    |             |

### 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 |

### invalidParams

| Name   | Type   | Required | Description                               |
|--------|--------|----------|---|
| name   | string | True     | Name of the invalid query parameter       |
| reason | string | True     | Reason why the query parameter 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 | True     |             |
| status        | string | True     |             |
| correlationID | string | False    |             |

### Example response

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

### Response

Status: 400, Bad request

| Name          | Type                 | Required | Description                      |
|---------------|----------------------|----------|----------------------------------|
| type          | string               | True     |                                  |
| title         | string               | True     |                                  |
| detail        | string               | True     |                                  |
| status        | string               | True     |                                  |
| correlationID | string               | False    |                                  |
| invalidParams | array[invalidParams] | False    | List of invalid query parameters |

### Example response

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

## Response

Status: 403, Forbidden

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

## Example response

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

## Error

Status: 404, Not found

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

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/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 |

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