



Manage authentication keys

REST API reference

NetApp

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Manage authentication keys

Manage authentication keys

Overview

Used to create and list authentication keys (NSE-AK).

Example

Creates an authentication key.



an external key manager must be configured on the admin SVM, as the authentication key will be associated with the admin SVM. The following example shows how to create an authentication key.

```
# The API:
POST /api/security/key-managers/{security_key_manager.uuid}/auth-keys

# The call:
curl -X POST 'https://<mgmt-ip>/api/security/key-managers/5fb1701a-d922-11e8-bfe8-005056bb017d/auth-keys?return_timeout=15&return_records=true' -H
'accept: application/hal+json'

# The response:
{
  "num_records": 1,
  "records": [
    {
      "key_id":
"000000000000000000200000000000100531d8cdc38437c2627b6b1726dd2675c000000000
0000000",
      "key_tag": "vsim1"
    }
  ]
}
```

Retrieving a list of all of the authentication keys associated with the admin SVM.

The following example shows how to retrieve a list of all of the authentication keys associated with the admin SVM.

```
# The API:
GET /api/security/key-managers/{security_key_manager.uuid}/auth-keys

# The call:
curl -X GET 'https://<mgmt-ip>/api/security/key-managers/5fb1701a-d922-11e8-bfe8-005056bb017d/auth-keys?fields=*' -H 'accept: application/hal+json'

# The response:
{
  "num_records": 2,
  "records": [
    {
      "security_key_manager": {
        "uuid": "d36a654d-14b4-11ed-b82e-005056bb8f59"
      },
      "key_id":
"00000000000000000200000000000100052ab79fc51a430dbb16f1c0d2054cfe000000000
0000000",
      "key_tag": "vsim1"
    },
    {
      "security_key_manager": {
        "uuid": "d36a654d-14b4-11ed-b82e-005056bb8f59"
      },
      "key_id":
"000000000000000002000000000001003f32ce2dc55d2764c07da74e722c179b000000000
0000000",
      "key_tag": "vsim1"
    }
  ]
}
```

Retrieving a specific authentication key associated with the admin SVM.

The following example shows how to a specific authentication key associated with the admin SVM and return the key-tag.

```
= The API:

GET /api/security/key-managers/{security_key_manager.uuid}/auth-
keys/{key-id}
```

= The call:

```
curl -X GET 'https://+++<mgmt-ip>+++/api/security/key-managers/5fb1701a-  
d922-11e8-bfe8-005056bb017d/auth-  
keys/0000000000000000020000000000010041a2dda969b0d179db8f1c78d629d0f100000  
00000000000?fields=key_tag' -H 'accept: application/hal+json'+++</mgmt-  
ip>+++
```

= The response:

```
{  
  "security_key_manager": {  
    "uuid": "d36a654d-14b4-11ed-b82e-005056bb8f59"  
  },  
  "key_id":  
    "0000000000000000020000000000010041a2dda969b0d179db8f1c78d629d0f1000000000  
    0000000",  
  "key_tag": "vsim1"  
}
```

```
[[IDa94ed58b83a75aa6bed3f7b612ea1850]]
```

= Retrieve authentication keys associated with the admin SVM

```
[.api-doc-operation .api-doc-operation-get]#GET# [.api-doc-code-  
block]#`/security/key-managers/{security_key_manager.uuid}/auth-keys`#
```

Introduced In: 9.12

Retrieves a list of all authentication keys associated with the admin SVM.

== Related ONTAP commands

* `security key-manager key query`

== Required properties

* `security\_key\_manager.uuid` - UUID of the external key manager.

== Parameters

```
[cols=5*,options=header]
```

```
|===
```

```
|Name  
|Type  
|In  
|Required  
|Description
```

```
|key_id  
|string  
|query  
|False  
a|Filter by key_id
```

```
|key_tag  
|string  
|query  
|False  
a|Filter by key_tag
```

```
|security_key_manager.uuid  
|string  
|path  
|True  
a|External key manager UUID
```

```
|fields  
|array[string]  
|query  
|False  
a|Specify the fields to return.
```

```
|max_records  
|integer  
|query  
|False  
a|Limit the number of records returned.
```

```
|return_timeout  
|integer  
|query  
|False  
a|The number of seconds to allow the call to execute before returning.
```

When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached.

- * Default value: 15

- * Max value: 120

- * Min value: 0

|return_records

|boolean

|query

|False

a|The default is true for GET calls. When set to false, only the number of records is returned.

- * Default value: 1

|order_by

|array[string]

|query

|False

a|Order results by specified fields and optional [asc|desc] direction. Default direction is 'asc' for ascending.

|===

== Response

Status: 200, Ok

[cols=3*,options=header]

|===

|Name

|Type

|Description

|_links

|link:#_links[_links]

a|

|num_records

|integer

a|Number of records

```

|records
|array[link:#key_manager_auth_key[key_manager_auth_key]]
a|

|===

.Example response
[%collapsible%closed]
=====
[source,json,subs=+macros]
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "key_id":
"000000000000000000002000000000001003aa8ce6a4fea3e466620134bea9510a1000000000
0000000",
      "key_tag": "Authentication-Key-01",
      "security_key_manager": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563434"
      }
    }
  ]
}
=====

== Error

```

ONTAP Error Response Codes

|===

| Error Code | Description

| 65536828

| External key management is not enabled for the SVM.

| 65536856

| No key servers found for the SVM.

| 65536896

| External key management is not configured on the partner site.

| 65538800

| External KMIP DKMIP keymanager not configured on administrative Vserver.

| 65538801

| Internal error while accessing keymanager database.

| 65538802

| The UUID provided is not associated with the administrator SVM key manager.

|===

Also see the table of common errors in the [xref:{relative_path}getting_started_with_the_ontap_rest_api.html#Response_body\[Response body\]](#) overview section of this documentation.

[cols=3*,options=header]

|===

|Name

|Type

|Description

|error

|link:#returned_error[returned_error]

a|

|===

```

.Example error
[%collapsible%closed]
====
[source,json,subs=+macros]
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
====

== Definitions

[.api-def-first-level]
.See Definitions
[%collapsible%closed]
//Start collapsible Definitions block
====
[#href]
[.api-collapsible-fifth-title]
href

[cols=3*,options=header]
|===
|Name
|Type
|Description

|href
|string
a|

|===

[#_links]
[.api-collapsible-fifth-title]
_links

```

```

[cols=3*,options=header]
|===
|Name
|Type
|Description

|next
|link:#href[href]
a|

|self
|link:#href[href]
a|

|===

[#self_link]
[.api-collapsible-fifth-title]
self_link

[cols=3*,options=header]
|===
|Name
|Type
|Description

|self
|link:#href[href]
a|

|===

[#_links]
[.api-collapsible-fifth-title]
_links

[cols=3*,options=header]
|===
|Name
|Type
|Description

|self
|link:#href[href]
a|

```

|===

```
[#security_key_manager]
[.api-collapsible-fifth-title]
security_key_manager
```

Security key manager object reference.

```
[cols=3*,options=header]
```

|===

```
|Name
|Type
|Description
```

```
|_links
|link:#_links[_links]
a|
```

```
|uuid
|string
a|Key manager UUID
```

|===

```
[#key_manager_auth_key]
[.api-collapsible-fifth-title]
key_manager_auth_key
```

```
[cols=3*,options=header]
```

|===

```
|Name
|Type
|Description
```

```
|_links
|link:#self_link[self_link]
a|
```

```
|key_id
|string
a|Key identifier.
```

```
|key_tag
|string
a|Optional parameter to define key-tag for the authentication key, length
0-32 characters.
```

```
|security_key_manager
|link:#security_key_manager[security_key_manager]
a|Security key manager object reference.
```

```
|===
```

```
[#error_arguments]
[.api-collapsible-fifth-title]
error_arguments
```

```
[cols=3*,options=header]
```

```
|===
```

```
|Name
|Type
|Description
```

```
|code
|string
a|Argument code
```

```
|message
|string
a|Message argument
```

```
|===
```

```
[#returned_error]
[.api-collapsible-fifth-title]
returned_error
```

```
[cols=3*,options=header]
```

```
|===
```

```
|Name
|Type
|Description
```

```
|arguments
|array[link:#error_arguments[error_arguments]]
a|Message arguments
```

```
|code
|string
a|Error code
```

```
|message
|string
a|Error message
```

```
|target
|string
a|The target parameter that caused the error.
```

```
|===
```

```
//end collapsible .Definitions block
====
```

```
[[ID59fc8856caa3ed58089c0238b1799602]]
= Create an authentication key
```

```
[.api-doc-operation .api-doc-operation-post]#POST# [.api-doc-code-
block]#`/security/key-managers/{security_key_manager.uuid}/auth-keys`#
```

Introduced In: 9.12

Creates an authentication key.

== Related ONTAP commands

* `security key-manager key create`

== Required properties

* `security\_key\_manager.uuid` - UUID of the external key manager.

== Parameters

```
[cols=5*,options=header]
|===
```

```
|Name
|Type
|In
|Required
|Description
```

```
|security_key_manager.uuid
|string
|path
|True
a|External key manager UUID
```

```
|return_records
|boolean
|query
|False
a|The default is false. If set to true, the records are returned.
```

* Default value:

```
|===
```

== Request Body

```
[cols=3*,options=header]
|===
```

```
|Name
|Type
|Description
```

```
|key_id
|string
a|Key identifier.
```

```
|key_tag
|string
a|Optional parameter to define key-tag for the authentication key, length
```

```
|passphrase
|string
a|Authentication passphrase, length 20-32 characters. May contain the '='
character.
```

$$| \quad = \quad = \quad =$$

status: 201, Created

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```

|records
|array[link:#key_manager_auth_key[key_manager_auth_key]]
a|

|===

.Example response
[%collapsible%closed]
====
[source,json,subs=+macros]
{
  "records": [
    {
      "key_id":
"0000000000000000002000000000001003aa8ce6a4fea3e466620134bea9510a1000000000
0000000",
      "key_tag": "Authentication-Key-01",
      "passphrase": "AuthenticationKey_01",
      "security_key_manager": {
        "uuid": "1cd8a442-86d1-11e0-aelc-123478563434"
      }
    }
  ]
}
====

=== Headers

[cols=3*,options=header]
|===
//header
|Name
|Description
|Type
//end header

//start row
|Location
|Useful for tracking the resource location
|string
//end row
//end table
|===

```

== Error

Status: Default

ONTAP Error Response Codes

```
|===  
| Error Code | Description  
  
| 65536048  
| The maximum number of authentication keys are already configured.  
  
| 65536053  
| Invalid passphrase length; passphrase must be 20-32 ASCII-range  
characters.  
  
| 65536056  
| The key tag value provided contains invalid characters.  
  
| 65536056  
| The key-tag option cannot contain any spaces, tabs or new lines.  
  
| 65536076  
| Failed to push authentication key to any registered key servers.  
  
| 65536160  
| Unable to determine the current number of configured authentication  
keys.  
  
| 65536264  
| Failed to create authentication key.  
  
| 65536265  
| Failed to create a key-id for the authentication key.  
  
| 65536828  
| External key management is not enabled for the SVM.  
  
| 65536856  
| No key servers found for the SVM.  
  
| 65536872  
| Error cleaning up key database after key creation error.  
  
| 65536896  
| External key management is not configured on the partner site.
```

```

| 65536987
| One or more key servers are unavailable.

| 65538800
| External KMIP DKMIP keymanager not configured on administrative Vserver.

| 65538801
| Internal error while accessing keymanager database.

| 65538802
| The UUID provided is not associated with the administrator SVM key
manager.

| 66060289
| Failed to store authentication key on key server.

| 66060304
| Invalid key length.
|===

```

Also see the table of common errors in the [xref:{relative_path}getting_started_with_the_ontap_rest_api.html#Response_body\[Response body\]](#) overview section of this documentation.

== Definitions

```

[.api-def-first-level]
.See Definitions
[%collapsible%closed]
//Start collapsible Definitions block
====
[#href]
[.api-collapsible-fifth-title]
href

[cols=3*,options=header]
|===
|Name
|Type
|Description

|href
|string
a|

```

```

|===

[#self_link]
[.api-collapsible-fifth-title]
self_link
[#_links]
[.api-collapsible-fifth-title]
_links
[#security_key_manager]
[.api-collapsible-fifth-title]
security_key_manager

Security key manager object reference.

```

```

[cols=3*,options=header]
|===
|Name
|Type
|Description

```

```

|uuid
|string
a|Key manager UUID

```

```

|===

[#key_manager_auth_key]
[.api-collapsible-fifth-title]
key_manager_auth_key

```

```

[cols=3*,options=header]
|===
|Name
|Type
|Description

```

```

|key_id
|string
a|Key identifier.

```

```

|key_tag
|string

```

a|Optional parameter to define key-tag for the authentication key, length 0-32 characters.

|passphrase

|string

a|Authentication passphrase, length 20-32 characters. May contain the '=' character.

|security_key_manager

|link:#security_key_manager[security_key_manager]

a|Security key manager object reference.

|===

[#error_arguments]

[.api-collapsible-fifth-title]

error_arguments

[cols=3*,options=header]

|===

|Name

|Type

|Description

|code

|string

a|Argument code

|message

|string

a|Message argument

|===

[#returned_error]

[.api-collapsible-fifth-title]

returned_error

[cols=3*,options=header]

|===

```

|Name
|Type
|Description

|arguments
|array[link:#error_arguments[error_arguments]]
a|Message arguments


|code
|string
a|Error code


|message
|string
a|Error message


|target
|string
a|The target parameter that caused the error.


|===

//end collapsible .Definitions block
====

[[ID81a4c0acce8575498408b8eb67e0de72]]
= Delete an authentication key

[.api-doc-operation .api-doc-operation-delete]#DELETE# [.api-doc-code-
block]#`/security/key-managers/{security_key_manager.uuid}/auth-
keys/{key_id}`#

*Introduced In:* 9.12

Deletes an authentication key.

== Related ONTAP commands

* `security key-manager key delete`

```

== Required properties

* `security\_key\_manager.uuid` - UUID of the external key manager.
* `key\_id` - Key ID of the authentication key to be deleted.

== Parameters

[cols=5*,options=header]

|==

|Name

|Type

|In

|Required

|Description

|security_key_manager.uuid

|string

|path

|True

a|External key manager UUID

|key_id

|string

|path

|True

a|Key ID of the authentication key to be deleted.

|==

== Response

Status: 200, Ok

== Error

Status: Default

ONTAP Error Response Codes

|==

| Error Code | Description

```

| 65536828
| External key management is not enabled for the SVM.

| 65536859
| Authentication key-Id provided for deletion is in use.

| 65536860
| Key-id provided for deletion is not an authentication key.

| 65538800
| External KMIP DKMIP keymanager not configured on administrative Vserver.

| 65538801
| Internal error while accessing keymanager database.

| 65538802
| The UUID provided is not associated with the administrator SVM key
manager.

| 66060296
| Failed to delete key from an external key server.
|===

```

Also see the table of common errors in the [xref:{relative_path}getting_started_with_the_ontap_rest_api.html#Response_body\[Response body\] overview](#) section of this documentation.

```

[cols=3*,options=header]
|===
|Name
|Type
|Description

|error
|link:#returned_error[returned_error]
a|

```

```

|===

```

```

.Example error
[%collapsible%closed]
====
[source,json,subs=+macros]
{

```

```

"error": {
  "arguments": [
    {
      "code": "string",
      "message": "string"
    }
  ],
  "code": "4",
  "message": "entry doesn't exist",
  "target": "uuid"
}
}

```

====

== Definitions

```

[.api-def-first-level]
.See Definitions
[%collapsible%closed]
//Start collapsible Definitions block

```

====

```

[#error_arguments]
[.api-collapsible-fifth-title]
error_arguments

```

```

[cols=3*,options=header]

```

|===

```

|Name
|Type
|Description

```

```

|code
|string
a|Argument code

```

```

|message
|string
a|Message argument

```

|===

```

[#returned_error]
[.api-collapsible-fifth-title]
returned_error

```

```
[cols=3*,options=header]
|===
|Name
|Type
|Description

|arguments
|array[link:#error_arguments[error_arguments]]
a|Message arguments
```

```
|code
|string
a|Error code
```

```
|message
|string
a|Error message
```

```
|target
|string
a|The target parameter that caused the error.
```

```
|===
```

```
//end collapsible .Definitions block
====
```

```
[[ID1706dfd0857a68eed87d45771089acb4]]
= List all authentication keys associated with the admin SVM
```

```
[.api-doc-operation .api-doc-operation-get]#GET# [.api-doc-code-
block]#`/security/key-managers/{security_key_manager.uuid}/auth-
keys/{key_id}`#
```

```
*Introduced In:* 9.12
```

```
Retrieves the authentication key identified by the 'key_id' and associated
with the admin SVM.
```

== Related ONTAP commands

* `security key-manager key query`

== Required properties

* `security\_key\_manager.uuid` - UUID of the external key manager.

* `key\_id` - Key ID of the authentication key to be retrieved.

== Parameters

[cols=5*,options=header]

|==

|Name

|Type

|In

|Required

|Description

|key_tag

|string

|query

|False

a|Filter by key_tag

|security_key_manager.uuid

|string

|path

|True

a|External key manager UUID

|key_id

|string

|path

|True

a|Key ID of the authentication key to be retrieved.

|fields

|array[string]

|query

|False

a|Specify the fields to return.

```
|max_records
|integer
|query
|False
a|Limit the number of records returned.
```

```
|return_timeout
|integer
|query
|False
a|The number of seconds to allow the call to execute before returning.
When iterating over a collection, the default is 15 seconds. ONTAP
returns earlier if either max records or the end of the collection is
reached.
```

```
* Default value: 15
* Max value: 120
* Min value: 0
```

```
|return_records
|boolean
|query
|False
a|The default is true for GET calls. When set to false, only the number
of records is returned.
```

```
* Default value: 1
```

```
|order_by
|array[string]
|query
|False
a|Order results by specified fields and optional [asc|desc] direction.
Default direction is 'asc' for ascending.
```

```
|===
```

```
== Response
```

Status: 200, Ok

```

[cols=3*,options=header]
|===
|Name
|Type
|Description

|_links
|link:#self_link[self_link]
a|

|key_id
|string
a|Key identifier.

|key_tag
|string
a|Optional parameter to define key-tag for the authentication key, length
0-32 characters.

|security_key_manager
|link:#security_key_manager[security_key_manager]
a|Security key manager object reference.

|===

.Example response
[%collapsible%closed]
====
[source,json,subs=+macros]
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "key_id":
"00000000000000000000000020000000000001003aa8ce6a4fea3e466620134bea9510a1000000000
0000000",
  "key_tag": "Authentication-Key-01",
  "security_key_manager": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"

```

```

    }
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563434"
}
}
====

== Error

```

Status: Default

ONTAP Error Response Codes

```

|===
| Error Code | Description
|
| 65536828
| External key management is not enabled for the SVM.
|
| 65536856
| No key servers found for the SVM.
|
| 65536896
| External key management is not configured on the partner site.
|
| 65538800
| External KMIP DKMIP keymanager not configured on administrative Vserver.
|
| 65538801
| Internal error while accessing keymanager database.
|
| 65538802
| The UUID provided is not associated with the administrator SVM key
manager.
|===

```

Also see the table of common errors in the [xref:{relative_path}getting_started_with_the_ontap_rest_api.html#Response_body\[Response body\]](#) overview section of this documentation.

```

[cols=3*,options=header]
|===
|Name
|Type

```

```

|Description

|error
|link:#returned_error[returned_error]
a|

|===

.Example error
[%collapsible%closed]
=====
[source,json,subs=+macros]
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
=====

== Definitions

[.api-def-first-level]
.See Definitions
[%collapsible%closed]
//Start collapsible Definitions block
=====
[#href]
[.api-collapsible-fifth-title]
href

[cols=3*,options=header]
|===
|Name
|Type
|Description

|href

```

```

|string
a|

|===

[#self_link]
[.api-collapsible-fifth-title]
self_link

[cols=3*,options=header]
|===
|Name
|Type
|Description

|self
|link:#href[href]
a|

|===

[#_links]
[.api-collapsible-fifth-title]
_links

[cols=3*,options=header]
|===
|Name
|Type
|Description

|self
|link:#href[href]
a|

|===

[#security_key_manager]
[.api-collapsible-fifth-title]
security_key_manager

Security key manager object reference.

```

```

[cols=3*,options=header]
|===
|Name
|Type
|Description

|_links
|link:#_links[_links]
a|

|uuid
|string
a|Key manager UUID

|===

[#error_arguments]
[.api-collapsible-fifth-title]
error_arguments

[cols=3*,options=header]
|===
|Name
|Type
|Description

|code
|string
a|Argument code

|message
|string
a|Message argument

|===

[#returned_error]
[.api-collapsible-fifth-title]
returned_error

[cols=3*,options=header]
|===

```

```
|Name
|Type
|Description

|arguments
|array[link:#error_arguments[error_arguments]]
a|Message arguments
```

```
|code
|string
a|Error code
```

```
|message
|string
a|Error message
```

```
|target
|string
a|The target parameter that caused the error.
```

```
|===
```

```
//end collapsible .Definitions block
====
```

```
:leveloffset: -1
```

```
:leveloffset: -1
```

```
<<<
```

```
*Copyright information*
```

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