



View and create TOTP profiles

REST API reference

NetApp
September 09, 2025

This PDF was generated from https://docs.netapp.com/us-en/ontap-restapi-9161/security_login_totps_endpoint_overview.html on September 09, 2025. Always check docs.netapp.com for the latest.

Table of Contents

- View and create TOTP profiles 1
 - Security login totps endpoint overview 1
 - Overview 1
 - Examples 1
 - Retrieve TOTP profiles configured for user accounts 5
 - Related ONTAP commands 5
 - Learn more 5
 - Parameters 5
 - Response 6
 - Error 8
 - Definitions 8
 - Create the TOTP profile for a user account 10
 - Required properties 11
 - Related ONTAP commands 11
 - Learn more 11
 - Parameters 11
 - Request Body 11
 - Response 12
 - Error 13
 - Definitions 14

View and create TOTP profiles

Security login totps endpoint overview

Overview

This API configures the TOTP(Time based OTP) profile for user accounts for secure shell (SSH) access. Prerequisites: You must configure TOTP as a secondary authentication method in /security/accounts when creating users. You must have a TOTP application that you can use to get TOTP keys. You are only allowed to create a TOTP profile for yourself, not for others. Admin cannot create TOTP profiles for any users.

Examples

Creating a TOTP profile for cluster-scoped user accounts

Specify the user account name and comment in the body of the POST request. The owner.uuid or owner.name are not required for a cluster-scoped user account.

```
# The API:
POST "/api/security/login/totps"

# The call:
curl -k https://<mgmt-ip>/api/security/login/totps --request POST --data
'{ "account": { "name": "pubuser2" }, "comment": "Cserver-Creation" }'

# The response:
{
  "num_records": 1,
  "records": [
    {
      "owner": {
        "uuid": "b009a9e7-4081-b576-7575-ada21efcaf16",
        "name": "Default",
        "_links": {
          "self": {
            "href": "/api/svm/svms/b009a9e7-4081-b576-7575-ada21efcaf16"
          }
        }
      },
      "account": {
        "name": "pubuser2"
      },
      "secret_key": "DRY5CAJGTQCL5TV4D3UAMYXJFM",
      "install_url":
        "https://www.google.com/chart?chs=200x200&chld=M&#124;0&cht=qr&chl=otpauth
        ://totp/root@node1%3Fsecret%3DDRY5CAJGTQCL5TV4D3UAMYXJFM%26issuer%3Dnode1"
    }
  ]
}
```

```

"verification_code": "946090",
"emergency_codes": [
  "54200192",
  "10418385",
  "52726505",
  "41704451",
  "20744310"
],
"_links": {
  "self": {
    "href": "/api/security/login/totps/b009a9e7-4081-b576-7575-ada21efcaf16/pubuser2"
  }
}
]
}

```

Creating a TOTP profile for SVM-scoped user accounts

For an SVM-scoped account, specify either the SVM name as the owner.name or the SVM UUID as the owner.uuid along with other parameters for the user account. These parameters indicate the SVM that contains the user account for the TOTP profile being created and can be obtained from the response body of the GET request performed on the API `/api/svm/svms`.

```

# The API:
POST "/api/security/login/totps"

# The call:
curl -k https://<mgmt-ip>/api/security/login/totps --request POST --data
'{ "account": { "name": "pubuser4" }, "comment": "Vserver-
Creation", "owner.name": "vs0" }'

# The response:
{
  "num_records": 1,
  "records": [
    {
      "owner": {
        "uuid": "b019a9e7-4081-b576-7575-ada21efcaf16",
        "name": "vs0",
        "_links": {
          "self": {
            "href": "/api/svm/svms/b019a9e7-4081-b576-7575-ada21efcaf16"
          }
        }
      }
    }
  ]
}

```

```

    },
    "account": {
      "name": "pubuser4"
    },
    "secret_key": "DRY5CAJGTQCL5TV4D3UAMYXJFM",
    "install_url":
    "https://www.google.com/chart?chs=200x200&chld=M&#124;0&cht=qr&chl=otpauth
    ://totp/root@node1%3Fsecret%3DDRY5CAJGTQCL5TV4D3UAMYXJFM%26issuer%3Dnode1"
  ,
    "verification_code": "946090",
    "emergency_codes": [
      "54200192",
      "10418385",
      "52726505",
      "41704451",
      "20744310"
    ],
    "_links": {
      "self": {
        "href": "/api/security/login/totps/b019a9e7-4081-b576-7575-
        ada21efcaf16/pubuser4"
      }
    }
  }
]
}

```

Retrieving the configured TOTP profile for user accounts

Retrieves the TOTP profiles associated with the user accounts or a filtered list (for a specific user account name, a specific SVM and so on).

```

# The API:
GET "/api/security/login/totps"

# The call to retrieve TOTP profiles associated with TOTP configured user
accounts in the cluster:
curl -k https://<mgmt-ip>/api/security/login/totps

# the response:
{
  "records": [
    {
      "owner": {
        "uuid": "b009a9e7-4081-b576-7575-ada21efcaf16",
        "name": "Default",
        "_links": {
          "self": {
            "href": "/api/svm/svms/b009a9e7-4081-b576-7575-ada21efcaf16"
          }
        }
      },
      "account": {
        "name": "pubuser2",
        "_links": {
          "self": {
            "href": "/api/security/accounts/b009a9e7-4081-b576-7575-ada21efcaf16/pubuser2"
          }
        }
      },
      "_links": {
        "self": {
          "href": "/api/security/login/totps/b009a9e7-4081-b576-7575-ada21efcaf16/pubuser2"
        }
      }
    }
  ],
  "num_records": 1,
  "_links": {
    "self": {
      "href": "/api/security/login/totps"
    }
  }
}

```

Retrieve TOTP profiles configured for user accounts

GET /security/login/totps

Introduced In: 9.13

Retrieves the TOTP profiles configured for user accounts.

Related ONTAP commands

- `security login totp show`

Learn more

- [DOC /security/login/totps](#)
- [DOC /security/accounts](#)

Parameters

Name	Type	In	Required	Description
scope	string	query	False	Filter by scope
enabled	boolean	query	False	Filter by enabled
sha_fingerprint	string	query	False	Filter by sha_fingerprint
account.name	string	query	False	Filter by account.name
owner.name	string	query	False	Filter by owner.name
owner.uuid	string	query	False	Filter by owner.uuid
comment	string	query	False	Filter by comment
fields	array[string]	query	False	Specify the fields to return.
max_records	integer	query	False	Limit the number of records returned.

Name	Type	In	Required	Description
return_records	boolean	query	False	The default is true for GET calls. When set to false, only the number of records is returned. • Default value: 1
return_timeout	integer	query	False	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: 1 • Max value: 120 • Min value: 0
order_by	array[string]	query	False	Order results by specified fields and optional [asc

Response

Status: 200, Ok

Name	Type	Description
_links	_links	
num_records	integer	Number of records.
records	array[totp]	

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "account": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "joe.smith"
      },
      "comment": "string",
      "enabled": "",
      "owner": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "scope": "string",
      "sha_fingerprint": "string"
    }
  ]
}
```

Error

Status: Default, Error

Name	Type	Description
error	returned_error	

Example error

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

Definitions

See Definitions

href

Name	Type	Description
href	string	

_links

Name	Type	Description
next	href	
self	href	

_links

Name	Type	Description
self	href	

account_reference

Name	Type	Description
_links	_links	
name	string	User account

owner

Owner name and UUID that uniquely identifies the TOTP profile.

Name	Type	Description
_links	_links	
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

totp

TOTP profile for the user account used to access SSH.

Name	Type	Description
_links	_links	

Name	Type	Description
account	account_reference	
comment	string	Optional comment for the TOTP profile.
enabled	boolean	Status of the TOTP profile.
owner	owner	Owner name and UUID that uniquely identifies the TOTP profile.
scope	string	Scope of the entity. Set to "cluster" for cluster owned objects and to "svm" for SVM owned objects.
sha_fingerprint	string	SHA fingerprint for the TOTP secret key.

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned_error

Name	Type	Description
arguments	array[error_arguments]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

Create the TOTP profile for a user account

POST /security/login/totps

Introduced In: 9.13

Creates a TOTP profile for a user account.

Required properties

- `owner.uuid` - Account owner UUID.
- `account.name` - Account user name.

Related ONTAP commands

- `security login totp create`

Learn more

- [DOC /security/login/totps](#)
- [DOC /security/accounts](#)

Parameters

Name	Type	In	Required	Description
return_records	boolean	query	False	The default is false. If set to true, the records are returned. • Default value:

Request Body

Name	Type	Description
account	account_reference	
comment	string	Optional comment for the TOTP profile.
owner	owner	Owner name and UUID that uniquely identifies the TOTP profile.
scope	string	Scope of the entity. Set to "cluster" for cluster owned objects and to "svm" for SVM owned objects.
sha_fingerprint	string	SHA fingerprint for the TOTP secret key.

Example request

```
{
  "account": {
    "name": "joe.smith"
  },
  "comment": "string",
  "enabled": "",
  "owner": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "scope": "string",
  "sha_fingerprint": "string"
}
```

Response

Status: 201, Created

Name	Type	Description
num_records	integer	Number of records.
records	array[totp_post]	

Example response

```
{
  "num_records": 1,
  "records": [
    {
      "account": {
        "name": "joe.smith"
      },
      "comment": "string",
      "emergency_codes": "17503785",
      "enabled": 1,
      "install_url": "string",
      "owner": {
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "scope": "string",
      "secret_key": "string",
      "sha_fingerprint": "string",
      "verification_code": "string"
    }
  ]
}
```

Headers

Name	Description	Type
Location	Useful for tracking the resource location	string

Error

Status: Default

ONTAP Error Response Codes

Error Code	Description
144834561	TOTP is not configured for the user.

Also see the table of common errors in the [Response body](#) overview section of this documentation.

Definitions

See Definitions

href

Name	Type	Description
href	string	

_links

account_reference

Name	Type	Description
name	string	User account

owner

Owner name and UUID that uniquely identifies the TOTP profile.

Name	Type	Description
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

totp

TOTP profile for the user account used to access SSH.

Name	Type	Description
account	account_reference	
comment	string	Optional comment for the TOTP profile.
owner	owner	Owner name and UUID that uniquely identifies the TOTP profile.
scope	string	Scope of the entity. Set to "cluster" for cluster owned objects and to "svm" for SVM owned objects.

Name	Type	Description
sha_fingerprint	string	SHA fingerprint for the TOTP secret key.

totp_post

Response object of the TOTP profile creation.

Name	Type	Description
account	account_reference	
comment	string	Optional comment for the TOTP profile.
emergency_codes	array[string]	TOTP profile emergency codes for a user. These codes are for emergency use when a user cannot access 2FA codes through other means.
install_url	string	TOTP profile installation URL for a user.
owner	owner	Owner name and UUID that uniquely identifies the TOTP profile.
scope	string	Scope of the entity. Set to "cluster" for cluster owned objects and to "svm" for SVM owned objects.
secret_key	string	TOTP profile secret key for a user.
sha_fingerprint	string	SHA fingerprint for the TOTP secret key.
verification_code	string	TOTP profile verification code for a user.

error_arguments

Name	Type	Description
code	string	Argument code

Name	Type	Description
message	string	Message argument

returned_error

Name	Type	Description
arguments	array[error_arguments]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

Copyright information

Copyright © 2025 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.