Manage SAML service

REST API reference

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Manage SAML service

Security authentication cluster saml-sp endpoint overview

Overview

This API is used to retrieve and display relevant information pertaining to the SAML service provider configuration in the cluster. The POST request creates a SAML service provider configuration if there is none present. The DELETE request removes the SAML service provider configuration. The PATCH request enables and disables SAML in the cluster. Various responses are shown in the examples below.

Examples

Retrieving the SAML service provider configuration in the cluster

The following output shows the SAML service provider configuration in the cluster.

```
# The API:
/api/security/authentication/cluster/saml-sp

# The call:
curl -X GET "https://<mgmt-ip>/api/security/authentication/cluster/saml-
sp" -H "accept: application/hal+json"

# The response:
{
"idp_uri": "https://examplelab.customer.com/idp/Metadata",
"enabled": true,
"host": "172.21.74.181",
"certificate": {
  "ca": "cluster1",
  "serial_number": "156F10C3EB4C51C1",
  "common_name": "cluster1"
},
"_links": {
  "self": {
    "href": "/api/security/authentication/cluster/saml-sp"
  }
}
}
```

Creating the SAML service provider configuration

The following output shows how to create a SAML service provider configuration in the cluster.

```
# The API:
/api/security/authentication/cluster/saml-sp

# The call:
curl -X POST "https://<mgmt-ip>/api/security/authentication/cluster/saml-
sp?return_records=true" -H "accept: application/hal+json" -d '{ "idp_uri":
"https://examplelab.customer.com/idp/Metadata", "host": "172.21.74.181",
"certificate": { "ca": "cluster1", "serial_number": "156F10C3EB4C51C1" }}'
```

Updating the SAML service provider configuration

The following output shows how to enable a SAML service provider configuration in the cluster.

Disabling the configuration requires the client to be authenticated through SAML prior to performing the operation.

```
# The API:
/api/security/authentication/cluster/saml-sp

# The call:
curl -X PATCH "https://<mgmt-ip>/api/security/authentication/cluster/saml-
sp/" -d '{ "enabled": true }'
```

Deleting the SAML service provider configuration

```
# The API:
/api/security/authentication/cluster/saml-sp

# The call:
curl -X DELETE "https://<mgmt-
ip>/api/security/authentication/cluster/saml-sp/"
```

Delete a SAML service provider configuration

DELETE `/security/authentication/cluster/saml-sp`

Introduced In: 9.6

Deletes a SAML service provider configuration.

Response

```
Status: 200, Ok
```

Error

```
Status: Default
```

ONTAP Error Response Codes

Error Code	Description
12320803	SAML must be disabled before the configuration can be removed.

Name	Type	Description
error	error	

Example error


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

Definitions

See Definitions

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

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.

Retrieve a SAML service provider configuration

GET `/security/authentication/cluster/saml-sp`

Introduced In: 9.6

Retrieves a SAML service provider configuration.

Parameters

Name	Type	In	Required	Description
idp_uri	string	query	False	Filter by idp_uri • Introduced in: 9.7
certificate.ca	string	query	False	Filter by certificate.ca • Introduced in: 9.7

Name	Type	In	Required	Description
certificate.serial_number	string	query	False	Filter by certificate.serial_number • Introduced in: 9.7
certificate.common_name	string	query	False	Filter by certificate.common_name • Introduced in: 9.7
host	string	query	False	Filter by host • Introduced in: 9.7
enabled	boolean	query	False	Filter by enabled • Introduced in: 9.7
max_records	integer	query	False	Limit the number of records returned.
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

Name	Type	In	Required	Description
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
desc] direction. Default direction is 'asc' for ascending.	fields	array[string]	query	False

Response

```
Status: 200, Ok
```

Name	Type	Description
_links	_links	
certificate	certificate	
enabled	boolean	The SAML service provider is enabled. Valid for PATCH and GET operations only.
host	string	The SAML service provider host.
idp_uri	string	The identity provider (IdP) metadata location. Required for POST operations.

Example response


```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "certificate": {
    "ca": "string",
    "common_name": "cluster1",
    "serial_number": "1506B24A94F566BA"
  },
  "host": "string",
  "idp_uri": "https://idp.example.com/FederationMetadata/2007-
06/FederationMetadata.xml"
}
```


Error

```
Status: Default, Error
```

Name	Type	Description
error	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
self	href	

certificate

Name	Type	Description
ca	string	Server certificate issuing certificate authority (CA). This cannot be used with the server certificate common name.
common_name	string	Server certificate common name. This cannot be used with the certificate authority (CA) or serial_number.
serial_number	string	Server certificate serial number. This cannot be used with the server certificate common name.

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

Name	Type	Description
arguments	array[error_arguments]	Message arguments
code	string	Error code
message	string	Error message

Name	Type	Description
target	string	The target parameter that caused the error.

Update a SAML service provider configuration

PATCH `/security/authentication/cluster/saml-sp`

Introduced In: 9.6

Updates a SAML service provider configuration.

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
enabled	boolean	The SAML service provider is enabled. Valid for PATCH and GET operations only.

Response

```
Status: 200, Ok
```

Error

```
Status: Default
```

ONTAP Error Response Codes

Error Code	Description
12320791	SAML can only be disabled using the console or a SAML-authenticated application.

Definitions

See Definitions

href

Name	Type	Description
href	string	

_links

certificate

security_saml_sp

Name	Type	Description
enabled	boolean	The SAML service provider is enabled. Valid for PATCH and GET operations only.

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

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 a SAML service provider configuration

POST `/security/authentication/cluster/saml-sp`

Introduced In: 9.6

Creates a SAML service provider configuration. Note that "common_name" is mutually exclusive with "serial_number" and "ca" in POST. SAML will initially be disabled, requiring a patch to set "enabled" to "true", so that the user has time to complete the setup of the IdP.

Required properties

- `idp_uri`

Optional properties

- `certificate`
- `enabled`
- `host`

Parameters

Name	Type	In	Required	Description
verify_metadata_server	boolean	query	False	Verify IdP metadata server identity. • Default value: 1

Name	Type	In	Required	Description
return_timeout	integer	query	False	The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202. • Default value: 1 • Max value: 120 • Min value: 0
return_records	boolean	query	False	The default is false. If set to true, the records are returned. • Default value:

Request Body

Name	Type	Description
certificate	certificate	
host	string	The SAML service provider host.

Name	Type	Description
idp_uri	string	The identity provider (IdP) metadata location. Required for POST operations.

Example request

```
{
  "certificate": {
    "ca": "string",
    "common_name": "cluster1",
    "serial_number": "1506B24A94F566BA"
  },
  "enabled": null,
  "host": "string",
  "idp_uri": "https://idp.example.com/FederationMetadata/2007-
06/FederationMetadata.xml"
}
```

Response

```
Status: 202, Accepted
```

Name	Type	Description
job	job_link	

Example response

```
{
  "job": {
    "uuid": "string"
  }
}
```

Error

```
Status: Default
```

ONTAP Error Response Codes

Error Code	Description
12320789	Failed to download data file from specified URI.
12320794	The host parameter provided must be the cluster management interface's IP address. If the cluster management interface is not available, the node management interface's IP address must be used.
12320795	A valid cluster or node management interface IP address must be provided.
12320805	The certificate information provided does not match any installed certificates.
12320806	The certificate information entered does not match any installed certificates.
12320814	An invalid IDP URI has been entered.
12320815	An IDP URI must be an HTTPS or FTPS URI.

Definitions

See Definitions

href

Name	Type	Description
href	string	

_links

certificate

Name	Type	Description
ca	string	Server certificate issuing certificate authority (CA). This cannot be used with the server certificate common name.
common_name	string	Server certificate common name. This cannot be used with the certificate authority (CA) or serial_number.
serial_number	string	Server certificate serial number. This cannot be used with the server certificate common name.

security_saml_sp

Name	Type	Description
certificate	certificate	
host	string	The SAML service provider host.
idp_uri	string	The identity provider (IdP) metadata location. Required for POST operations.

job_link

Name	Type	Description
uuid	string	The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation.

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

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.

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