View iSCSI sessions

REST API reference

NetApp
September 12, 2025

This PDF was generated from https://docs.netapp.com/us-en/ontap-restapi-97/protocols_san_iscsi_sessions_endpoint_overview.html on September 12, 2025. Always check docs.netapp.com for the latest.

Table of Contents

View iSCSI sessions . . . 1
- Protocols SAN iSCSI sessions endpoint overview . . . 1
  - Overview . . . 1
  - Examples . . . 1
- Retrieve iSCSI sessions . . . 5
  - Related ONTAP commands . . . 5
  - Learn more . . . 6
  - Parameters . . . 6
  - Response . . . 8
  - Error . . . 10
  - Definitions . . . 11
- Retrieve an iSCSI session . . . 15
  - Related ONTAP commands . . . 15
  - Learn more . . . 15
  - Parameters . . . 15
  - Response . . . 16
  - Error . . . 18
  - Definitions . . . 19

View iSCSI sessions

Protocols SAN iSCSI sessions endpoint overview

Overview

An iSCSI session is one or more TCP connections that link an iSCSI initiator with an iSCSI target. TCP connections can be added and removed from an iSCSI session by the iSCSI initiator. Across all TCP connections within an iSCSI session, an initiator sees one and the same target. After the connection is established, iSCSI control, data, and status messages are communicated over the session.

The iSCSI sessions REST API provides information about iSCSI initiators that have successfully logged in to ONTAP.

Examples

Retrieving all iSCSI sessions

```
# The API:
GET /api/protocols/san/iscsi/sessions

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/san/iscsi/sessions" -H
"accept: application/hal+json"

# The response:
{
"records": [
  {
    "svm": {
      "uuid": "a009a9e7-4081-b576-7575-ada21efcaf16",
      "name": "svm1",
      "_links": {
        "self": {
          "href": "/api/svm/svms/a009a9e7-4081-b576-7575-ada21efcaf16"
        }
      }
    },
    "target_portal_group": "iscsi_lif1",
    "tsih": 10,
    "_links": {
      "self": {
        "href": "/api/protocols/san/iscsi/sessions/a009a9e7-4081-b576-
7575-ada21efcaf16/iscsi_lif1/10"
      }
    }
  },
```

```
  {
    "svm": {
      "uuid": "b009a9e7-4081-b576-7575-ada21efcaf16",
      "name": "svm2",
      "_links": {
        "self": {
          "href": "/api/svm/svms/b009a9e7-4081-b576-7575-ada21efcaf16"
        }
      }
    },
    "target_portal_group": "iscsi_lif2",
    "tsih": 11,
    "_links": {
      "self": {
        "href": "/api/protocols/san/iscsi/sessions/b009a9e7-4081-b576-
7575-ada21efcaf16/iscsi_lif2/11"
      }
    }
  }
],
"num_records": 2,
"_links": {
  "self": {
    "href": "/api/protocols/san/iscsi/sessions"
  }
}
}
```

Retrieving all of the iSCSI sessions under the target portal group *iscsi_lif1*

The `tpgroup` query parameter is used to perform the query.

```
# The API:
GET /api/protocols/san/iscsi/sessions

# The call:
curl -X GET "https://<mgmt-
ip>/api/protocols/san/iscsi/sessions?tpgroup=iscsi_lif1" -H "accept:
application/hal+json"

# The response:
{
"records": [
  {
    "svm": {
      "uuid": "a009a9e7-4081-b576-7575-ada21efcaf16",
      "name": "svm1",
      "_links": {
        "self": {
          "href": "/api/svm/svms/a009a9e7-4081-b576-7575-ada21efcaf16"
        }
      }
    },
    "target_portal_group": "iscsi_lif1",
    "tsih": 10,
    "_links": {
      "self": {
        "href": "/api/protocols/san/iscsi/sessions/a009a9e7-4081-b576-
7575-ada21efcaf16/iscsi_lif1/10"
      }
    }
  }
],
"num_records": 1,
"_links": {
  "self": {
    "href": "/api/protocols/san/iscsi/sessions"
  }
}
}
```

Retrieving an iSCSI session

```
# The API:
GET
```

```
/api/protocols/san/iscsi/sessions/{svm.uuid}/{target_portal_group}/{tsih}

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/san/iscsi/sessions/a009a9e7-
4081-b576-7575-ada21efcaf16/iscsi_lif1/10" -H "accept:
application/hal+json"

# The response:
{
"svm": {
  "uuid": "a009a9e7-4081-b576-7575-ada21efcaf16",
  "name": "svm1",
  "_links": {
    "self": {
      "href": "/api/svm/svms/a009a9e7-4081-b576-7575-ada21efcaf16"
    }
  }
},
"target_portal_group": "iscsi_lif1",
"tsih": 10,
"initiator": {
  "name": "iqn.1994-05.com.example:string"
},
"isid": "61:62:63:64:65:00",
"target_portal_group_tag": 1027,
"connections": [
  {
    "cid": 1,
    "authentication_type": "chap",
    "initiator_address": {
      "address": "10.224.123.85",
      "port": 43827
    },
    "interface": {
      "name": "iscsi_lif1",
      "uuid": "c15439b4-dbb4-11e8-90ac-005056bba882",
      "ip": {
        "address": "192.168.0.1",
        "port": 3260
      },
      "_links": {
        "self": {
          "href": "/api/network/ip/interfaces/c15439b4-dbb4-11e8-90ac-
005056bba882"
        }
      }
```

```
    }
  }
],
"igroups": [
  {
    "uuid": "af7838cd-f993-4faf-90b7-5524787ae1e8",
    "name": "igroup1",
    "_links": {
      "self": {
        "href": "/api/protocols/san/igroups/af7838cd-f993-4faf-90b7-
5524787ae1e8"
      }
    }
  },
  {
    "uuid": "bf7838cd-f993-4faf-90b7-5524787ae1e8",
    "name": "igroup2",
    "_links": {
      "self": {
        "href": "/api/protocols/san/igroups/bf7838cd-f993-4faf-90b7-
5524787ae1e8"
      }
    }
  }
],
"_links": {
  "self": {
    "href": "/api/protocols/san/iscsi/sessions/a009a9e7-4081-b576-7575-
ada21efcaf16/iscsi_lif1/10"
  }
}
}
```


Retrieve iSCSI sessions

GET `/protocols/san/iscsi/sessions`

Retrieves iSCSI sessions.

Related ONTAP commands

- `vserver iscsi connection show`
- `vserver iscsi session parameter show`
- `vserver iscsi session show`

Learn more

- DOC /protocols/san/iscsi/sessions

Parameters

Name	Type	In	Required	Description
tsih	integer	query	False	Filter by tsih
initiator.alias	string	query	False	Filter by initiator.alias
initiator.name	string	query	False	Filter by initiator.name
isid	string	query	False	Filter by isid
igroups.uuid	string	query	False	Filter by igroups.uuid
igroups.name	string	query	False	Filter by igroups.name
svm.uuid	string	query	False	Filter by svm.uuid
svm.name	string	query	False	Filter by svm.name
target_portal_group_tag	integer	query	False	Filter by target_portal_group_tag
connections.authentication_type	string	query	False	Filter by connections.authentication_type
connections.initiator_address.port	integer	query	False	Filter by connections.initiator_address.port
connections.initiator_address.address	string	query	False	Filter by connections.initiator_address.address
connections.cid	integer	query	False	Filter by connections.cid

Name	Type	In	Required	Description
connections.interface.name	string	query	False	Filter by connections.interface.name
connections.interface.uuid	string	query	False	Filter by connections.interface.uuid
connections.interface.ip.address	string	query	False	Filter by connections.interface.ip.address
connections.interface.ip.port	integer	query	False	Filter by connections.interface.ip.port
target_portal_group	string	query	False	Filter by target_portal_group
fields	array[string]	query	False	Specify the fields to return.
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.
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.
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[iscsi_session]	

Example response


```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "connections": [
        {
          "_links": {
            "next": {
              "href": "/api/resourcelink"
            },
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "authentication_type": "string",
          "cid": 0,
          "initiator_address": {
            "address": "10.10.10.7",
            "port": 55432
          },
          "interface": {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "ip": {
              "address": "10.10.10.7",
              "port": 3260
            },
            "name": "lif1",
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
```

```
          }
        }
      ],
      "igroups": [
        {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "igroup1",
          "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
        }
      ],
      "initiator": {
        "alias": "initiator_alias1",
        "name": "iqn.1992-01.example.com:string"
      },
      "isid": "61:62:63:64:65:00",
      "svm": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "target_portal_group": "tpgroup1",
      "target_portal_group_tag": 0,
      "tsih": 0
    }
  ]
}
```


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
next	href	
self	href	

_links

Name	Type	Description
self	href	

initiator_address

The TCP socket information for the initiator end of the connection. This is useful for network packet debugging.

Name	Type	Description
address	string	The TCP IPv4 or IPv6 address of the initiator end of the iSCSI connection.
port	integer	The TCP port number of the initiator end of the iSCSI connection.

ip

The IP information. ONTAP only supports port 3260.

Name	Type	Description
address	string	IPv4 or IPv6 address
port	integer	The TCP port number of the iSCSI access endpoint.

interface

The network interface information for the target end of the connection.

Name	Type	Description
_links	_links	
ip	ip	The IP information. ONTAP only supports port 3260. • readOnly: 1
name	string	The name of the interface.
uuid	string	The UUID that uniquely identifies the interface.

iscsi_connection

An active iSCSI connection.

Name	Type	Description
_links	_links	
authentication_type	string	The iSCSI authentication type used to establish the connection.
cid	integer	The identifier of the connection within the session.
initiator_address	initiator_address	The TCP socket information for the initiator end of the connection. This is useful for network packet debugging.
interface	interface	The network interface information for the target end of the connection.

igroups

Name	Type	Description
_links	_links	
name	string	The name of the initiator group.
uuid	string	The unique identifier of the initiator group.

initiator

The initiator that created the session.

Name	Type	Description
alias	string	The initiator alias.
name	string	The world wide unique name of the initiator.

svm

Name	Type	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

iscsi_session

An iSCSI session is one or more TCP connections that link an iSCSI initiator with an iSCSI target. TCP connections can be added and removed from an iSCSI session by the iSCSI initiator. Across all TCP connections within an iSCSI session, an initiator sees one and the same target. After the connection is established, iSCSI control, data, and status messages are communicated over the session.

Name	Type	Description
_links	_links	
connections	array[iscsi_connection]	The iSCSI connections that make up the iSCSI session.
igroups	array[igroups]	The initiator groups in which the initiator is a member.
initiator	initiator	The initiator that created the session.
isid	string	The initiator portion of the session identifier specified by the initiator during login.
svm	svm	
target_portal_group	string	The target portal group to which the session belongs.
target_portal_group_tag	integer	The target portal group tag of the session.

Name	Type	Description
tsih	integer	The target session identifier handle (TSIH) of the session.

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 an iSCSI session

GET `/protocols/san/iscsi/sessions/{svm.uuid}/{tpgroup}/{tsih}`

Retrieves an iSCSI session.

Related ONTAP commands

- `vserver iscsi connection show`
- `vserver iscsi session parameter show`
- `vserver iscsi session show`

Learn more

- DOC /protocols/san/iscsi/sessions

Parameters

Name	Type	In	Required	Description
svm.uuid	string	path	True	The unique identifier of the SVM of the iSCSI session.
tpgroup	string	path	True	The target portal group of the iSCSI session.
tsih	integer	path	True	The target session identifying handle.
fields	array[string]	query	False	Specify the fields to return.

Response

```
Status: 200, Ok
```

Name	Type	Description
_links	_links	
connections	array[iscsi_connection]	The iSCSI connections that make up the iSCSI session.
igroups	array[igroups]	The initiator groups in which the initiator is a member.
initiator	initiator	The initiator that created the session.
isid	string	The initiator portion of the session identifier specified by the initiator during login.
svm	svm	
target_portal_group	string	The target portal group to which the session belongs.
target_portal_group_tag	integer	The target portal group tag of the session.
tsih	integer	The target session identifier handle (TSIH) of the session.

Example response


```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "connections": [
    {
      "_links": {
        "next": {
          "href": "/api/resourcelink"
        },
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "authentication_type": "string",
      "cid": 0,
      "initiator_address": {
        "address": "10.10.10.7",
        "port": 55432
      },
      "interface": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "ip": {
          "address": "10.10.10.7",
          "port": 3260
        },
        "name": "lif1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    }
  ],
  "igroups": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
```

```
      "name": "igroup1",
      "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
    }
  ],
  "initiator": {
    "alias": "initiator_alias1",
    "name": "iqn.1992-01.example.com:string"
  },
  "isid": "61:62:63:64:65:00",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "target_portal_group": "tpgroup1",
  "target_portal_group_tag": 0,
  "tsih": 0
}
```


Error

```
Status: Default
```

ONTAP Error Response Codes

Error Code	Description
2621462	An SVM with the specified UUID does not exist.

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	

_links

Name	Type	Description
next	href	
self	href	

initiator_address

The TCP socket information for the initiator end of the connection. This is useful for network packet debugging.

Name	Type	Description
address	string	The TCP IPv4 or IPv6 address of the initiator end of the iSCSI connection.
port	integer	The TCP port number of the initiator end of the iSCSI connection.

ip

The IP information. ONTAP only supports port 3260.

Name	Type	Description
address	string	IPv4 or IPv6 address
port	integer	The TCP port number of the iSCSI access endpoint.

interface

The network interface information for the target end of the connection.

Name	Type	Description
_links	_links	
ip	ip	The IP information. ONTAP only supports port 3260. • readOnly: 1
name	string	The name of the interface.
uuid	string	The UUID that uniquely identifies the interface.

iscsi_connection

An active iSCSI connection.

Name	Type	Description
_links	_links	
authentication_type	string	The iSCSI authentication type used to establish the connection.
cid	integer	The identifier of the connection within the session.
initiator_address	initiator_address	The TCP socket information for the initiator end of the connection. This is useful for network packet debugging.
interface	interface	The network interface information for the target end of the connection.

igroups

Name	Type	Description
_links	_links	
name	string	The name of the initiator group.
uuid	string	The unique identifier of the initiator group.

initiator

The initiator that created the session.

Name	Type	Description
alias	string	The initiator alias.
name	string	The world wide unique name of the initiator.

svm

Name	Type	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

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.

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.