



Manage SAN LUN maps

ONTAP 9.15.1 REST API reference

NetApp
September 11, 2024

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Manage SAN LUN maps

Protocols SAN lun-maps endpoint overview

Overview

A LUN map is an association between a LUN and an initiator group. When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between an initiator group and a LUN is many initiator groups to many LUNs.

A LUN map also configures the cluster nodes from which network paths to the LUN are advertised via the SAN protocols as part of the Selective LUN Map (SLM) functionality of ONTAP. These nodes are referred to as the reporting nodes of a LUN map. For further information, see [DOC /protocols/san/lun-maps/{lun.uuid}/{igroup.uuid}/reporting-nodes](#) .

The LUN map REST API allows you to create, delete, and discover LUN maps, and manage the reporting nodes of a LUN map.

Examples

Creating a LUN map

```
# The API:
POST /api/protocols/san/lun-maps

# The call:
curl -X POST 'https://<mgmt-ip>/api/protocols/san/lun-maps' -H 'Accept:
application/hal+json' -d '{ "svm": { "name": "svm1" }, "igroup": { "name":
"igroup1" }, "lun": { "name": "/vol/vol1/lun1" } }'
```

Retrieving all of the LUN maps

```
# The API:
GET /api/protocols/san/lun-maps

# The call:
curl -X GET 'https://<mgmt-ip>/api/protocols/san/lun-maps' -H 'Accept:
application/hal+json'

# The response:
{
  "records": [
    {
      "svm": {
        "uuid": "03157e81-24c5-11e9-9ec1-005056bba643",
```

```
    "name": "svm1",
    "_links": {
      "self": {
        "href": "/api/svm/svms/03157e81-24c5-11e9-9ec1-005056bba643"
      }
    }
  },
  "lun": {
    "uuid": "a60d9862-9bee-49a6-8162-20d2421bb1a6",
    "name": "/vol/vol1/lun1",
    "_links": {
      "self": {
        "href": "/api/storage/luns/a60d9862-9bee-49a6-8162-20d2421bb1a6"
      }
    }
  },
  "igroup": {
    "uuid": "40d98b2c-24c5-11e9-9ec1-005056bba643",
    "name": "ig1",
    "_links": {
      "self": {
        "href": "/api/protocols/san/igroups/40d98b2c-24c5-11e9-9ec1-005056bba643"
      }
    }
  },
  "_links": {
    "self": {
      "href": "/api/protocols/san/lun-maps/a60d9862-9bee-49a6-8162-20d2421bb1a6/40d98b2c-24c5-11e9-9ec1-005056bba643"
    }
  }
},
"num_records": 1,
"_links": {
  "self": {
    "href": "/api/protocols/san/lun-maps"
  }
}
}
```

Retrieving a specific LUN map

```
# The API:
GET /api/protocols/san/lun-maps/{lun.uuid}/{igroup.uuid}

# The call:
curl -X GET 'https://<mgmt-ip>/api/protocols/san/lun-maps/a60d9862-9bee-49a6-8162-20d2421bb1a6/40d98b2c-24c5-11e9-9ec1-005056bba643' -H 'Accept: application/hal+json'

# The response:
{
  "svm": {
    "uuid": "03157e81-24c5-11e9-9ec1-005056bba643",
    "name": "svm1",
    "_links": {
      "self": {
        "href": "/api/svm/svms/03157e81-24c5-11e9-9ec1-005056bba643"
      }
    }
  },
  "lun": {
    "uuid": "a60d9862-9bee-49a6-8162-20d2421bb1a6",
    "name": "/vol/vol1/lun1",
    "node": {
      "uuid": "7d8607ea-24c1-11e9-9ec1-005056bba643",
      "name": "node1",
      "_links": {
        "self": {
          "href": "/api/cluster/nodes/7d8607ea-24c1-11e9-9ec1-005056bba643"
        }
      }
    },
    "smbc": {
      "replicated": false
    },
    "_links": {
      "self": {
        "href": "/api/storage/luns/a60d9862-9bee-49a6-8162-20d2421bb1a6"
      }
    }
  },
  "igroup": {
    "uuid": "40d98b2c-24c5-11e9-9ec1-005056bba643",
    "name": "ig1",
    "os_type": "linux",
```

```

"protocol": "mixed",
"replicated": false,
"_links": {
  "self": {
    "href": "/api/protocols/san/igroups/40d98b2c-24c5-11e9-9ec1-005056bba643"
  }
},
"logical_unit_number": 0,
"reporting_nodes": [
  {
    "uuid": "11a465f5-2ac0-11eb-a303-005056bb1e81",
    "name": "node1",
    "_links": {
      "node": {
        "href": "/cluster/nodes/11a465f5-2ac0-11eb-a303-005056bb1e81"
      },
      "self": {
        "href": "/api/protocols/san/lun-maps/a60d9862-9bee-49a6-8162-20d2421bb1a6/40d98b2c-24c5-11e9-9ec1-005056bba643/reporting-nodes/11a465f5-2ac0-11eb-a303-005056bb1e81"
      }
    }
  },
  {
    "uuid": "6c7cb50f-2abf-11eb-9840-005056bbd490",
    "name": "node2",
    "_links": {
      "node": {
        "href": "/cluster/nodes/6c7cb50f-2abf-11eb-9840-005056bbd490"
      },
      "self": {
        "href": "/api/protocols/san/lun-maps/a60d9862-9bee-49a6-8162-20d2421bb1a6/40d98b2c-24c5-11e9-9ec1-005056bba643/reporting-nodes/6c7cb50f-2abf-11eb-9840-005056bbd490"
      }
    }
  }
],
"_links": {
  "self": {
    "href": "/api/protocols/san/lun-maps/a60d9862-9bee-49a6-8162-20d2421bb1a6/40d98b2c-24c5-11e9-9ec1-005056bba643"
  }
}

```

```
}
```

Deleting a LUN map

```
# The API:
DELETE /api/protocols/san/lun-maps/{lun.uuid}/{igroup.uuid}

# The call:
curl -X DELETE 'https://<mgmt-ip>/api/protocols/san/lun-maps/a60d9862-
9bee-49a6-8162-20d2421bb1a6/40d98b2c-24c5-11e9-9ec1-005056bba643' -H
'Accept: application/hal+json'
```

Retrieve LUN maps

GET /protocols/san/lun-maps

Introduced In: 9.6

Retrieves LUN maps.

Related ONTAP commands

- `lun mapping show`

Learn more

- [DOC /protocols/san/lun-maps](#)

Parameters

Name	Type	In	Required	Description
logical_unit_number	integer	query	False	Filter by logical_unit_number <ul style="list-style-type: none">• Max value: 4095• Min value: 0
igroup.protocol	string	query	False	Filter by igroup.protocol
igroup.uuid	string	query	False	Filter by igroup.uuid

Name	Type	In	Required	Description
igroup.initiators	string	query	False	Filter by igroup.initiators
igroup.name	string	query	False	Filter by igroup.name
igroup.replicated	boolean	query	False	Filter by igroup.replicated • Introduced in: 9.15
igroup.os_type	string	query	False	Filter by igroup.os_type
svm.uuid	string	query	False	Filter by svm.uuid
svm.name	string	query	False	Filter by svm.name
reporting_nodes.name	string	query	False	Filter by reporting_nodes.name • Introduced in: 9.10
reporting_nodes.uuid	string	query	False	Filter by reporting_nodes.uuid • Introduced in: 9.10
lun.node.uuid	string	query	False	Filter by lun.node.uuid
lun.node.name	string	query	False	Filter by lun.node.name
lun.smbc.replicated	boolean	query	False	Filter by lun.smbc.replicated • Introduced in: 9.15
lun.uuid	string	query	False	Filter by lun.uuid

Name	Type	In	Required	Description
lun.name	string	query	False	Filter by lun.name
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. <ul style="list-style-type: none"> • 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. <ul style="list-style-type: none"> • Max value: 120 • Min value: 0 • Default value: 1
order_by	array[string]	query	False	Order results by specified fields and optional [asc

Response

Status: 200, Ok

Name	Type	Description
_links	_links	

Name	Type	Description
num_records	integer	The number of records in the response.
records	array[lun_map]	

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "igroup": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "initiators": [
          "iqn.1998-01.com.corp.iscsi:name1"
        ],
        "name": "igroup1",
        "os_type": "string",
        "protocol": "string",
        "uuid": "1ad8544d-8cd1-91e0-9e1c-723478563412"
      },
      "logical_unit_number": 1,
      "lun": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "/vol/volume1/qtreet1/lun1",
        "node": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          }
        }
      }
    }
  ]
}
```

```

    },
    "name": "node1",
    "uuid": "1cf8aa42-8cd1-12e0-a11c-423468563412"
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"reporting_nodes": [
  {
    "_links": {
      "node": {
        "href": "/api/resourcelink"
      },
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "node1",
    "uuid": "5ac8eb9c-4e32-dbaa-57ca-fb905976f54e"
  }
],
"svm": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "svm1",
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
}
]
}

```

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	

igroup

The initiator group to which the LUN is mapped. Required in POST by supplying either the `igroup.uuid`, `igroup.name`, or both.

Name	Type	Description
_links	_links	
initiators	array[string]	The initiators that are members of the initiator group.
name	string	The name of the initiator group. Valid in POST.
os_type	string	The host operating system of the initiator group. All initiators in the group should be hosts of the same operating system.
protocol	string	The protocols supported by the initiator group. This restricts the type of initiators that can be added to the initiator group.
replicated	boolean	This property reports if the initiator group is replicated.
uuid	string	The unique identifier of the initiator group. Valid in POST.

node

The LUN node.

Name	Type	Description
_links	_links	
name	string	The name of the LUN's node.
uuid	string	The unique identifier of the LUN node.

smbc

"Properties related to SM-BC replication."

Name	Type	Description
replicated	boolean	This property reports if the LUN is replicated via SM-BC.

lun

The LUN to which the initiator group is mapped. Required in POST by supplying either the `lun.uuid`, `lun.name`, or both.

Name	Type	Description
_links	_links	
name	string	The fully qualified path name of the LUN composed of a "/vol" prefix, the volume name, the (optional) qtree name, and file name of the LUN. Valid in POST.
node	node	The LUN node.
smbc	smbc	"Properties related to SM-BC replication."
uuid	string	The unique identifier of the LUN. Valid in POST.

[_links](#)

Name	Type	Description
node	href	

Name	Type	Description
self	href	

reporting_nodes

A cluster node from which network paths to the LUN are advertised by ONTAP via the SAN protocols.

Name	Type	Description
_links	_links	
name	string	The name of the node. Either <code>uuid</code> or <code>name</code> are required in POST.
uuid	string	The unique identifier of the node. Either <code>uuid</code> or <code>name</code> are required in POST.

svm

SVM, applies only to SVM-scoped objects.

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.

lun_map

A LUN map is an association between a LUN and an initiator group. When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.

Name	Type	Description
_links	_links	

Name	Type	Description
igroup	igroup	The initiator group to which the LUN is mapped. Required in POST by supplying either the <code>igroup.uuid</code> , <code>igroup.name</code> , or both.
logical_unit_number	integer	<p>The logical unit number assigned to the LUN when mapped to the specified initiator group. The number is used to identify the LUN to initiators in the initiator group when communicating through Fibre Channel Protocol or iSCSI. Optional in POST; if no value is provided, ONTAP assigns the lowest available value.</p> <ul style="list-style-type: none"> • example: 1 • Max value: 4095 • Min value: 0 • Introduced in: 9.6 • readCreate: 1 • x-nullable: true
lun	lun	The LUN to which the initiator group is mapped. Required in POST by supplying either the <code>lun.uuid</code> , <code>lun.name</code> , or both.

Name	Type	Description
reporting_nodes	array[reporting_nodes]	<p>The cluster nodes from which network paths to the mapped LUNs are advertised via the SAN protocols as part of the Selective LUN Map (SLM) feature of ONTAP.</p> <p>When a LUN map is created, the cluster node hosting the LUN and its high availability (HA) partner are set as the default reporting node. In POST, the property <code>additional_reporting_node</code> may be used to add an additional node and its HA partner.</p> <p>For further information, see DOC /protocols/san/lun-maps/{lun.uuid}/{igroup.uuid}/reporting-nodes .</p> <p>Platform Specifics</p> <ul style="list-style-type: none"> • Unified ONTAP: An additional node and its HA partner can be added or removed for a LUN map. • ASA.Next: Adding or removing reporting nodes of a LUN map is not supported. • <code>readOnly</code>: 1 • Introduced in: 9.10
svm	svm	SVM, applies only to SVM-scoped objects.

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 a LUN map

POST /protocols/san/lun-maps

Introduced In: 9.6

Creates a LUN map.

Required properties

- `svm.uuid` or `svm.name` - Existing SVM in which to create the LUN map.
- `igroup.uuid` or `igroup.name` - Existing initiator group to map to the specified LUN.
- `lun.uuid` or `lun.name` - Existing LUN to map to the specified initiator group.

Default property values

If not specified in POST, the following default property values are assigned.

- `logical_unit_number` - If no value is provided, ONTAP assigns the lowest available value.

Related ONTAP commands

- `lun mapping create`

Learn more

- [DOC /protocols/san/lun-maps](#)

Parameters

Name	Type	In	Required	Description
additional_reporting_node.uuid	string	query	False	The unique identifier of an ONTAP cluster node to add to the default reporting nodes for the LUN map. The HA partner for the node is also added. <ul style="list-style-type: none"> Introduced in: 9.10
additional_reporting_node.name	string	query	False	The name of an ONTAP cluster node to add to the default reporting nodes for the LUN map. The HA partner for the node is also added. <ul style="list-style-type: none"> Introduced in: 9.10
return_records	boolean	query	False	The default is false. If set to true, the records are returned. <ul style="list-style-type: none"> Default value:

Request Body

Name	Type	Description
_links	_links	
igroup	igroup	The initiator group to which the LUN is mapped. Required in POST by supplying either the <code>igroup.uuid</code> , <code>igroup.name</code> , or both.

Name	Type	Description
logical_unit_number	integer	<p>The logical unit number assigned to the LUN when mapped to the specified initiator group. The number is used to identify the LUN to initiators in the initiator group when communicating through Fibre Channel Protocol or iSCSI. Optional in POST; if no value is provided, ONTAP assigns the lowest available value.</p> <ul style="list-style-type: none"> • example: 1 • Max value: 4095 • Min value: 0 • Introduced in: 9.6 • readCreate: 1 • x-nullable: true
lun	lun	<p>The LUN to which the initiator group is mapped. Required in POST by supplying either the <code>lun.uuid</code>, <code>lun.name</code>, or both.</p>

Name	Type	Description
reporting_nodes	array[reporting_nodes]	<p>The cluster nodes from which network paths to the mapped LUNs are advertised via the SAN protocols as part of the Selective LUN Map (SLM) feature of ONTAP.</p> <p>When a LUN map is created, the cluster node hosting the LUN and its high availability (HA) partner are set as the default reporting node. In POST, the property <code>additional_reporting_node</code> may be used to add an additional node and its HA partner.</p> <p>For further information, see DOC /protocols/san/lun-maps/{lun.uuid}/{igroup.uuid}/reporting-nodes .</p> <p>Platform Specifics</p> <ul style="list-style-type: none"> • Unified ONTAP: An additional node and its HA partner can be added or removed for a LUN map. • ASA.Next: Adding or removing reporting nodes of a LUN map is not supported. • <code>readOnly</code>: 1 • Introduced in: 9.10
svm	svm	SVM, applies only to SVM-scoped objects.

Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "igroup": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "initiators": [
      "iqn.1998-01.com.corp.iscsi:namel"
    ],
    "name": "igroup1",
    "os_type": "string",
    "protocol": "string",
    "uuid": "1ad8544d-8cd1-91e0-9e1c-723478563412"
  },
  "logical_unit_number": 1,
  "lun": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "/vol/volume1/mtree1/lun1",
    "node": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "node1",
      "uuid": "1cf8aa42-8cd1-12e0-a11c-423468563412"
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "reporting_nodes": [
    {
      "_links": {
        "node": {
          "href": "/api/resourcelink"
        }
      }
    }
  ]
}
```

```

    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "node1",
  "uuid": "5ac8eb9c-4e32-dbaa-57ca-fb905976f54e"
}
],
"svm": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "svm1",
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
}
}

```

Response

Status: 201, Created

Name	Type	Description
_links	_links	
num_records	integer	The number of records in the response.
records	array[lun_map]	

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "igroup": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "initiators": [
          "iqn.1998-01.com.corp.iscsi:name1"
        ],
        "name": "igroup1",
        "os_type": "string",
        "protocol": "string",
        "uuid": "1ad8544d-8cd1-91e0-9e1c-723478563412"
      },
      "logical_unit_number": 1,
      "lun": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "/vol/volume1/qtreet1/lun1",
        "node": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          }
        }
      }
    }
  ]
}
```

```

    },
    "name": "node1",
    "uuid": "1cf8aa42-8cd1-12e0-a11c-423468563412"
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"reporting_nodes": [
  {
    "_links": {
      "node": {
        "href": "/api/resourcelink"
      },
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "node1",
    "uuid": "5ac8eb9c-4e32-dbaa-57ca-fb905976f54e"
  }
],
"svm": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "svm1",
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
}
}
]
}

```

Headers

Name	Description	Type
Location	Useful for tracking the resource location	string

Error

Status: Default

ONTAP Error Response Codes

Error Code	Description
1254207	The LUN is already mapped to the same initiator group.
2621462	The specified SVM does not exist or is not accessible to the caller.
2621706	Both the SVM UUID and SVM name were supplied, but don't refer to the same SVM.
2621707	No SVM was specified. Either <code>svm.name</code> or <code>svm.uuid</code> must be supplied.
5374053	The LUN is the destination of an ongoing restore operation and is inaccessible for I/O and management. Wait for the restore to complete and try the command again.
5374127	An invalid LUN name was specified.
5374238	The operation is not allowed on a LUN in a Snapshot copy.
5374316	A LUN move operation is in progress on the source LUN.
5374329	A LUN of class <code>vvol</code> cannot be mapped.
5374573	A node has no interface configured with the iSCSI or Fibre Channel protocols for the specified SVM.
5374574	Multiple nodes have no interface configured with the iSCSI or Fibre Channel protocols for the specified SVM.
5374581	A node has no interface configured with the iSCSI protocol for the specified SVM.
5374582	Multiple nodes have no interface configured with the iSCSI protocol for the specified SVM.
5374583	A node has no interface configured with the Fibre Channel protocol for the specified SVM.
5374584	Multiple nodes have no interface configured with the Fibre Channel protocol for the specified SVM.
5374652	An error was reported by the peer cluster while creating a replicated LUN map. The specific error will be included as a nested error.
5374901	Either <code>lun.uuid</code> or <code>lun.name</code> must be provided to create a LUN map.
5374902	Either <code>igroup.uuid</code> or <code>igroup.name</code> must be provided to create a LUN map.
5374920	The cluster node specified in <code>additional_reporting_node</code> does not exist.

Error Code	Description
5374921	The cluster node name and UUID specified in <code>additional_reporting_node</code> do not refer to the same cluster node.

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

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
self	href	

igroup

The initiator group to which the LUN is mapped. Required in POST by supplying either the `igroup.uuid`, `igroup.name`, or both.

Name	Type	Description
_links	_links	
initiators	array[string]	The initiators that are members of the initiator group.
name	string	The name of the initiator group. Valid in POST.
os_type	string	The host operating system of the initiator group. All initiators in the group should be hosts of the same operating system.
protocol	string	The protocols supported by the initiator group. This restricts the type of initiators that can be added to the initiator group.
replicated	boolean	This property reports if the initiator group is replicated.
uuid	string	The unique identifier of the initiator group. Valid in POST.

node

The LUN node.

Name	Type	Description
_links	_links	

Name	Type	Description
name	string	The name of the LUN's node.
uuid	string	The unique identifier of the LUN node.

smbc

"Properties related to SM-BC replication."

Name	Type	Description
replicated	boolean	This property reports if the LUN is replicated via SM-BC.

lun

The LUN to which the initiator group is mapped. Required in POST by supplying either the `lun.uuid`, `lun.name`, or both.

Name	Type	Description
_links	_links	
name	string	The fully qualified path name of the LUN composed of a "/vol" prefix, the volume name, the (optional) qtree name, and file name of the LUN. Valid in POST.
node	node	The LUN node.
smbc	smbc	"Properties related to SM-BC replication."
uuid	string	The unique identifier of the LUN. Valid in POST.

[_links](#)

Name	Type	Description
node	href	
self	href	

reporting_nodes

A cluster node from which network paths to the LUN are advertised by ONTAP via the SAN protocols.

Name	Type	Description
_links	_links	
name	string	The name of the node. Either <code>uuid</code> or <code>name</code> are required in POST.
uuid	string	The unique identifier of the node. Either <code>uuid</code> or <code>name</code> are required in POST.

svm

SVM, applies only to SVM-scoped objects.

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.

lun_map

A LUN map is an association between a LUN and an initiator group. When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.

Name	Type	Description
_links	_links	
igroup	igroup	The initiator group to which the LUN is mapped. Required in POST by supplying either the <code>igroup.uuid</code> , <code>igroup.name</code> , or both.

Name	Type	Description
logical_unit_number	integer	<p>The logical unit number assigned to the LUN when mapped to the specified initiator group. The number is used to identify the LUN to initiators in the initiator group when communicating through Fibre Channel Protocol or iSCSI. Optional in POST; if no value is provided, ONTAP assigns the lowest available value.</p> <ul style="list-style-type: none"> • example: 1 • Max value: 4095 • Min value: 0 • Introduced in: 9.6 • readCreate: 1 • x-nullable: true
lun	lun	<p>The LUN to which the initiator group is mapped. Required in POST by supplying either the <code>lun.uuid</code>, <code>lun.name</code>, or both.</p>

Name	Type	Description
reporting_nodes	array[reporting_nodes]	<p>The cluster nodes from which network paths to the mapped LUNs are advertised via the SAN protocols as part of the Selective LUN Map (SLM) feature of ONTAP.</p> <p>When a LUN map is created, the cluster node hosting the LUN and its high availability (HA) partner are set as the default reporting node. In POST, the property <code>additional_reporting_node</code> may be used to add an additional node and its HA partner.</p> <p>For further information, see DOC /protocols/san/lun-maps/{lun.uuid}/{igroup.uuid}/reporting-nodes .</p> <p>Platform Specifics</p> <ul style="list-style-type: none"> • Unified ONTAP: An additional node and its HA partner can be added or removed for a LUN map. • ASA.Next: Adding or removing reporting nodes of a LUN map is not supported. • <code>readOnly</code>: 1 • Introduced in: 9.10
svm	svm	SVM, applies only to SVM-scoped objects.

_links

Name	Type	Description
next	href	
self	href	

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.

Delete a LUN map

```
DELETE /protocols/san/lun-maps/{lun.uuid}/{igroup.uuid}
```

Introduced In: 9.6

Deletes a LUN map.

Related ONTAP commands

- `lun mapping delete`

Learn more

- [DOC /protocols/san/lun-maps](#)

Parameters

Name	Type	In	Required	Description
lun.uuid	string	path	True	
igroup.uuid	string	path	True	

Response

```
Status: 200, Ok
```

Error

Status: Default

ONTAP Error Response Codes

Error Code	Description
5374875	The specified LUN does not exist or is not accessible to the caller.
5374878	The specified initiator group does not exist, is not accessible to the caller, or is not in the same SVM as the specified LUN.
5374922	The specified LUN map does not exist.

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

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

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.

Retrieve a LUN map

GET /protocols/san/lun-maps/{lun.uuid}/{igroup.uuid}

Introduced In: 9.6

Retrieves a LUN map.

Related ONTAP commands

- `lun mapping show`

Learn more

- [DOC /protocols/san/lun-maps](#)

Parameters

Name	Type	In	Required	Description
lun.uuid	string	path	True	The unique identifier of the LUN.

Name	Type	In	Required	Description
igroup.uuid	string	path	True	The unique identifier of the igroup.
fields	array[string]	query	False	Specify the fields to return.

Response

Status: 200, Ok

Name	Type	Description
_links	_links	
igroup	igroup	The initiator group to which the LUN is mapped. Required in POST by supplying either the <code>igroup.uuid</code> , <code>igroup.name</code> , or both.
logical_unit_number	integer	The logical unit number assigned to the LUN when mapped to the specified initiator group. The number is used to identify the LUN to initiators in the initiator group when communicating through Fibre Channel Protocol or iSCSI. Optional in POST; if no value is provided, ONTAP assigns the lowest available value. <ul style="list-style-type: none"> • example: 1 • Max value: 4095 • Min value: 0 • Introduced in: 9.6 • readCreate: 1 • x-nullable: true
lun	lun	The LUN to which the initiator group is mapped. Required in POST by supplying either the <code>lun.uuid</code> , <code>lun.name</code> , or both.

Name	Type	Description
reporting_nodes	array[reporting_nodes]	<p>The cluster nodes from which network paths to the mapped LUNs are advertised via the SAN protocols as part of the Selective LUN Map (SLM) feature of ONTAP.</p> <p>When a LUN map is created, the cluster node hosting the LUN and its high availability (HA) partner are set as the default reporting node. In POST, the property <code>additional_reporting_node</code> may be used to add an additional node and its HA partner.</p> <p>For further information, see DOC /protocols/san/lun-maps/{lun.uuid}/{igroup.uuid}/reporting-nodes .</p> <p>Platform Specifics</p> <ul style="list-style-type: none"> • Unified ONTAP: An additional node and its HA partner can be added or removed for a LUN map. • ASA.Next: Adding or removing reporting nodes of a LUN map is not supported. • <code>readOnly:</code> 1 • Introduced in: 9.10
svm	svm	SVM, applies only to SVM-scoped objects.

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "igroup": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "initiators": [
      "iqn.1998-01.com.corp.iscsi:namel"
    ],
    "name": "igroup1",
    "os_type": "string",
    "protocol": "string",
    "uuid": "1ad8544d-8cd1-91e0-9e1c-723478563412"
  },
  "logical_unit_number": 1,
  "lun": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "/vol/volume1/mtree1/lun1",
    "node": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "node1",
      "uuid": "1cf8aa42-8cd1-12e0-a11c-423468563412"
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "reporting_nodes": [
    {
      "_links": {
        "node": {
          "href": "/api/resourcelink"
        }
      }
    }
  ]
}
```

```

    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "node1",
  "uuid": "5ac8eb9c-4e32-dbaa-57ca-fb905976f54e"
}
],
"svm": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "svm1",
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
}
}

```

Error

Status: Default

ONTAP Error Response Codes

Error Code	Description
5374852	The initiator group does not exist or is not accessible to the caller.
5374875	The LUN does not exist or is not accessible to the caller.

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

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
self	href	

igroup

The initiator group to which the LUN is mapped. Required in POST by supplying either the `igroup.uuid`, `igroup.name`, or both.

Name	Type	Description
_links	_links	
initiators	array[string]	The initiators that are members of the initiator group.
name	string	The name of the initiator group. Valid in POST.
os_type	string	The host operating system of the initiator group. All initiators in the group should be hosts of the same operating system.
protocol	string	The protocols supported by the initiator group. This restricts the type of initiators that can be added to the initiator group.
replicated	boolean	This property reports if the initiator group is replicated.
uuid	string	The unique identifier of the initiator group. Valid in POST.

node

The LUN node.

Name	Type	Description
_links	_links	

Name	Type	Description
name	string	The name of the LUN's node.
uuid	string	The unique identifier of the LUN node.

smbc

"Properties related to SM-BC replication."

Name	Type	Description
replicated	boolean	This property reports if the LUN is replicated via SM-BC.

lun

The LUN to which the initiator group is mapped. Required in POST by supplying either the `lun.uuid`, `lun.name`, or both.

Name	Type	Description
_links	_links	
name	string	The fully qualified path name of the LUN composed of a "/vol" prefix, the volume name, the (optional) qtree name, and file name of the LUN. Valid in POST.
node	node	The LUN node.
smbc	smbc	"Properties related to SM-BC replication."
uuid	string	The unique identifier of the LUN. Valid in POST.

[_links](#)

Name	Type	Description
node	href	
self	href	

reporting_nodes

A cluster node from which network paths to the LUN are advertised by ONTAP via the SAN protocols.

Name	Type	Description
_links	_links	
name	string	The name of the node. Either <code>uuid</code> or <code>name</code> are required in POST.
uuid	string	The unique identifier of the node. Either <code>uuid</code> or <code>name</code> are required in POST.

svm

SVM, applies only to SVM-scoped objects.

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.

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

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

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