



Retrieve FC port information

ONTAP 9.12.1 REST API reference

NetApp

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Retrieve FC port information

Network FC logins endpoint overview

Overview

Fibre Channel (FC) logins represent connections formed by FC initiators that have successfully logged in to ONTAP. This represents the FC login on which higher-level protocols such as Fibre Channel Protocol and NVMe over FC (NVMe/FC) rely.

The Fibre Channel logins REST API provides information about active FC logins.

Examples

Retrieving all FC logins

```
# The API:
GET /api/network/fc/logins

# The call:
curl -X GET "https://<mgmt-ip>/api/network/fc/logins" -H "Accept:
application/hal+json"

# The response:
{
  "records": [
    {
      "svm": {
        "uuid": "056403da-83a7-4b13-bc78-6a93e8ea3596",
        "name": "svm1",
        "_links": {
          "self": {
            "href": "/api/svm/svms/056403da-83a7-4b13-bc78-6a93e8ea3596"
          }
        }
      },
      "interface": {
        "uuid": "01056403-1383-bc4b-786a-93e8ea35969d",
        "name": "lif1",
        "_links": {
          "self": {
            "href": "/api/network/fc/interfaces/01056403-1383-bc4b-786a-93e8ea35969d"
          }
        }
      }
    }
  ],
}
```

```

    "initiator": {
      "wwpn": "8b:21:2f:07:00:00:00:00"
    },
    "_links": {
      "self": {
        "href": "/api/network/fc/logins/01056403-1383-bc4b-786a-93e8ea35969d/8b%3A21%3A2f%3A07%3A00%3A00%3A00%3A00"
      }
    }
  },
  {
    "svm": {
      "uuid": "056403da-83a7-4b13-bc78-6a93e8ea3596",
      "name": "svm1",
      "_links": {
        "self": {
          "href": "/api/svm/svms/056403da-83a7-4b13-bc78-6a93e8ea3596"
        }
      }
    },
    "interface": {
      "uuid": "02056403-1383-bc4b-786a-93e8ea35969d",
      "name": "lif2",
      "_links": {
        "self": {
          "href": "/api/network/fc/interfaces/02056403-1383-bc4b-786a-93e8ea35969d"
        }
      }
    },
    "initiator": {
      "wwpn": "8c:21:2f:07:00:00:00:00"
    },
    "_links": {
      "self": {
        "href": "/api/network/fc/logins/02056403-1383-bc4b-786a-93e8ea35969d/8c%3A21%3A2f%3A07%3A00%3A00%3A00%3A00"
      }
    }
  },
  {
    "svm": {
      "uuid": "156403da-83a7-4b13-bc78-6a93e8ea3596",
      "name": "svm2",
      "_links": {
        "self": {

```

```

        "href": "/api/svm/svms/156403da-83a7-4b13-bc78-6a93e8ea3596"
      }
    },
    "interface": {
      "uuid": "03056403-1383-bc4b-786a-93e8ea35969d",
      "name": "lif3",
      "_links": {
        "self": {
          "href": "/api/network/fc/interfaces/00056403-1383-bc4b-786a-93e8ea35969d"
        }
      }
    },
    "initiator": {
      "wwpn": "8a:21:2f:07:00:00:00:00"
    },
    "_links": {
      "self": {
        "href": "/api/network/fc/logins/00056403-1383-bc4b-786a-93e8ea35969d/8a%3A21%3A2f%3A07%3A00%3A00%3A00%3A00"
      }
    }
  },
  "num_records": 3,
  "_links": {
    "self": {
      "href": "/api/network/fc/logins"
    }
  }
}

```

Retrieving all FC logins with data protocol *fcp* in SVM *svm1*

The `svm.name` and `protocol` query parameters are used to perform the query.

```

# The API:
GET /api/network/fc/logins

# The call:
curl -X GET "https://<mgmt-ip>/api/network/fc/logins?svm.name=svm1&protocol=fcp" -H "Accept: application/hal+json"

```

```
# The response:
{
  "records": [
    {
      "svm": {
        "uuid": "056403da-83a7-4b13-bc78-6a93e8ea3596",
        "name": "svm1",
        "_links": {
          "self": {
            "href": "/api/svm/svms/056403da-83a7-4b13-bc78-6a93e8ea3596"
          }
        }
      },
      "interface": {
        "uuid": "01056403-1383-bc4b-786a-93e8ea35969d",
        "name": "lif2",
        "_links": {
          "self": {
            "href": "/api/network/fc/interfaces/01056403-1383-bc4b-786a-93e8ea35969d"
          }
        }
      },
      "initiator": {
        "wwpn": "8b:21:2f:07:00:00:00:00"
      },
      "protocol": "fcp",
      "_links": {
        "self": {
          "href": "/api/network/fc/logins/01056403-1383-bc4b-786a-93e8ea35969d/8b%3A21%3A2f%3A07%3A00%3A00%3A00%3A00"
        }
      }
    },
    {
      "svm": {
        "uuid": "056403da-83a7-4b13-bc78-6a93e8ea3596",
        "name": "svm1",
        "_links": {
          "self": {
            "href": "/api/svm/svms/056403da-83a7-4b13-bc78-6a93e8ea3596"
          }
        }
      },
      "interface": {
```

```

    "uuid": "02056403-1383-bc4b-786a-93e8ea35969d",
    "name": "lif3",
    "_links": {
      "self": {
        "href": "/api/network/fc/interfaces/02056403-1383-bc4b-786a-93e8ea35969d"
      }
    },
    "initiator": {
      "wwpn": "8c:21:2f:07:00:00:00:00"
    },
    "protocol": "fcp",
    "_links": {
      "self": {
        "href": "/api/network/fc/logins/02056403-1383-bc4b-786a-93e8ea35969d/8c%3A21%3A2f%3A07%3A00%3A00%3A00%3A00"
      }
    }
  },
  "num_records": 2,
  "_links": {
    "self": {
      "href": "/api/network/fc/logins?svm.name=svml&protocol=fcp"
    }
  }
}

```

Retrieving all FC logins for initiators belonging to *igroup1* and returning all of their properties

The `igroups.name` query parameter is used to perform the query. The `fields` query parameter is used to return all of the properties.

```

# The API:
GET /api/network/fc/logins

# The call:
curl -X GET "https://<mgmt-ip>/api/network/fc/logins?igroups.name=igroup1&fields=*" -H "Accept: application/hal+json"

# The response:
{

```

```

"records": [
  {
    "svm": {
      "uuid": "056403da-83a7-4b13-bc78-6a93e8ea3596",
      "name": "svm1",
      "_links": {
        "self": {
          "href": "/api/svm/svms/056403da-83a7-4b13-bc78-6a93e8ea3596"
        }
      }
    },
    "interface": {
      "uuid": "01056403-1383-bc4b-786a-93e8ea35969d",
      "name": "lif2",
      "wwpn": "8b:21:2f:07:00:00:00:00",
      "_links": {
        "self": {
          "href": "/api/network/fc/interfaces/01056403-1383-bc4b-786a-93e8ea35969d"
        }
      }
    },
    "initiator": {
      "wwpn": "8b:21:2f:07:00:00:00:00",
      "wwnn": "95:21:2f:07:00:00:00:00",
      "comment": "Example information about this initiator"
    },
    "igroups": [
      {
        "uuid": "243bbb8a-46e9-4b2d-a508-a62dc93df9d1",
        "name": "igroup1",
        "_links": {
          "self": {
            "href": "/api/protocols/san/igroups/243bbb8a-46e9-4b2d-a508-a62dc93df9d1"
          }
        }
      }
    ],
    "port_address": "8aa53",
    "protocol": "fc",
    "_links": {
      "self": {
        "href": "/api/network/fc/logins/01056403-1383-bc4b-786a-93e8ea35969d/8b%3A21%3A2f%3A07%3A00%3A00%3A00%3A00"
      }
    }
  }
]

```



```

    }
  }
],
"num_records": 1,
"_links": {
  "self": {
    "href": "/api/network/fc/logins?igroups.name=igroup1&fields=*"
  }
}
}
}

```

Retrieve FC logins

GET /network/fc/logins

Introduced In: 9.6

Retrieves FC logins.

Related ONTAP commands

- `vserver fcp initiator show`

Learn more

- SAN: [DOC /network/fc/logins](#)
- NVMe: [DOC /network/fc/logins](#)

Parameters

Name	Type	In	Required	Description
svm.uuid	string	query	False	Filter by svm.uuid
svm.name	string	query	False	Filter by svm.name
protocol	string	query	False	Filter by protocol
initiator.wwpn	string	query	False	Filter by initiator.wwpn
initiator.port_address	string	query	False	Filter by initiator.port_addresses

Name	Type	In	Required	Description
initiator.comment	string	query	False	Filter by initiator.comment • Introduced in: 9.9
initiator.wwnn	string	query	False	Filter by initiator.wwnn
initiator.aliases	string	query	False	Filter by initiator.aliases
interface.wwpn	string	query	False	Filter by interface.wwpn
interface.name	string	query	False	Filter by interface.name
interface.uuid	string	query	False	Filter by interface.uuid
igroups.name	string	query	False	Filter by igroups.name • maxLength: 96 • minLength: 1
igroups.uuid	string	query	False	Filter by igroups.uuid
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. • Default value: 1

Name	Type	In	Required	Description
return_timeout	integer	query	False	<p>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.</p> <ul style="list-style-type: none"> • 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	The number of records in the response.
records	array[fc_login]	

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "next": {
        "href": "/api/resourcelink"
      },
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "igroups": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "igroup1",
      "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
    },
    "initiator": {
      "aliases": {
      },
      "comment": "This is an FC initiator for host 5",
      "port_address": "5060A",
      "wwnn": "2f:a0:00:a0:98:0b:56:13",
      "wwpn": "2f:a0:00:a0:98:0b:56:13"
    },
    "interface": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "fc_lif1",
      "uuid": "3a09ab42-4da1-32cf-9d35-3385a6101a0b",

```

```

    "wwpn": "20:00:00:50:56:b4:13:a8"
  },
  "protocol": "fc_nvme",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}

```

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	

igroups

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

initiator

Information about the logged in FC initiator.

Name	Type	Description
aliases	array[string]	The logged in initiator world wide port name (WWPN) aliases.
comment	string	A comment available for use by the administrator. This is modifiable from the initiator REST endpoint directly. See PATCH /protocols/san/igroups/{igroup.uuid}/initiators/{name} .

Name	Type	Description
port_address	string	<p>The port address of the initiator's FC port.</p> <p>Each port in an FC switched fabric has its own unique port address for routing purposes. The port address is assigned by a switch in the fabric when that port logs in to the fabric. This property refers to the address given by a switch to the initiator port.</p> <p>This is useful for obtaining statistics and diagnostic information from FC switches.</p> <p>This is a hexadecimal encoded numeric value.</p>
wwnn	string	The logged in initiator world wide node name (WWNN).
wwpn	string	The logged in initiator WWPN.

interface

An FC interface.

Name	Type	Description
_links	_links	
name	string	The name of the FC interface.
uuid	string	The unique identifier of the FC interface.
wwpn	string	The WWPN of the FC interface.

svm

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

fc_login

A Fibre Channel (FC) login represents a connection formed by an FC initiator that has successfully logged in to ONTAP. This represents the FC login on which higher-level protocols such as Fibre Channel Protocol and NVMe over Fibre Channel (NVMe/FC) rely.

Name	Type	Description
_links	_links	
igroups	array[igroups]	The initiator groups in which the initiator is a member.
initiator	initiator	Information about the logged in FC initiator.
interface	interface	An FC interface.
protocol	string	The data protocol used to perform the login.
svm	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.

Retrieve an FC login

```
GET /network/fc/logins/{interface.uuid}/{initiator.wwpn}
```


Introduced In: 9.6

Retrieves an FC login.

Related ONTAP commands

- `vserver fcp initiator show`

Learn more

- SAN: [DOC /network/fc/logins](#)
- NVMe: [DOC /network/fc/logins](#)

Parameters

Name	Type	In	Required	Description
interface.uuid	string	path	True	The unique identifier of the FC interface through which the initiator logged in.
initiator.wwpn	string	path	True	The world wide port name (WWPN) of the initiator.
fields	array[string]	query	False	Specify the fields to return.

Response

Status: 200, Ok

Name	Type	Description
_links	_links	
igroups	array[igroups]	The initiator groups in which the initiator is a member.
initiator	initiator	Information about the logged in FC initiator.
interface	interface	An FC interface.
protocol	string	The data protocol used to perform the login.

Name	Type	Description
svm	svm	

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "igroups": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "igroup1",
    "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
  },
  "initiator": {
    "aliases": {
    },
    "comment": "This is an FC initiator for host 5",
    "port_address": "5060A",
    "wwnn": "2f:a0:00:a0:98:0b:56:13",
    "wwpn": "2f:a0:00:a0:98:0b:56:13"
  },
  "interface": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "fc_lif1",
    "uuid": "3a09ab42-4da1-32cf-9d35-3385a6101a0b",
    "wwpn": "20:00:00:50:56:b4:13:a8"
  },
  "protocol": "fc_nvme",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
```

```
{
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
}
```

Error

Status: Default

ONTAP Error Response Codes

Error Code	Description
4	The Fibre Channel login specified does not exist.
5373983	An invalid WWPN was supplied.
5374881	The Fibre Channel interface specified 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
next	href	
self	href	

_links

Name	Type	Description
self	href	

igroups

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

initiator

Information about the logged in FC initiator.

Name	Type	Description
aliases	array[string]	The logged in initiator world wide port name (WWPN) aliases.
comment	string	A comment available for use by the administrator. This is modifiable from the initiator REST endpoint directly. See PATCH /protocols/san/igroups/{igroup.uuid}/initiators/{name} .

Name	Type	Description
port_address	string	<p>The port address of the initiator's FC port.</p> <p>Each port in an FC switched fabric has its own unique port address for routing purposes. The port address is assigned by a switch in the fabric when that port logs in to the fabric. This property refers to the address given by a switch to the initiator port.</p> <p>This is useful for obtaining statistics and diagnostic information from FC switches.</p> <p>This is a hexadecimal encoded numeric value.</p>
wwnn	string	The logged in initiator world wide node name (WWNN).
wwpn	string	The logged in initiator WWPN.

interface

An FC interface.

Name	Type	Description
_links	_links	
name	string	The name of the FC interface.
uuid	string	The unique identifier of the FC interface.
wwpn	string	The WWPN of the FC interface.

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.

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