



Retrieve FC port information

ONTAP 9.11.1 REST API reference

NetApp
April 02, 2024

Table of Contents

- Retrieve FC port information 1
- Network FC logins endpoint overview 1
- Retrieve FC logins 7
- Retrieve an FC login 14

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
protocol	string	query	False	Filter by protocol
svm.uuid	string	query	False	Filter by svm.uuid
svm.name	string	query	False	Filter by svm.name
igroups.name	string	query	False	Filter by igroups.name <ul style="list-style-type: none"> • maxLength: 96 • minLength: 1
igroups.uuid	string	query	False	Filter by igroups.uuid

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

Copyright information

Copyright © 2024 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.