



# **system switch commands**

## **ONTAP 9.14.1 commands**

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# system switch commands

## system switch ethernet configure-health-monitor

Ethernet switch health monitor configuration file setup.

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

### Description

The `system switch ethernet configure-health-monitor` command downloads an Ethernet switch's health monitor configuration file in the ZIP format, which contains the XML file and a signed version file. After download, ONTAP will check the signed file. If valid, the Ethernet switch health monitor restarts to use the new Ethernet switch health monitor configuration file.

### Parameters

**-node {<nodename>|local} - Node (privilege: advanced)**

Node on which the download and signed file validation process occurs. The Ethernet switch health monitor process will be restarted on this node. The configuration file will be ingested and made available to all nodes in the cluster.

**-package-url <text> - Package URL (privilege: advanced)**

URL that provides the location of the package to be downloaded. Standard URL schemes, including HTTP, HTTPS, FTP and FILE, are accepted.

### Examples

The following example downloads Ethernet switch health monitor configuration file to node1 from a web server and enables Ethernet switch health monitor to process it:

```
cluster1::*> system switch ethernet configure-health-monitor -node node1
-package-url
http://example.com/hm_config.zip
```

## system switch ethernet create

Add information about an Ethernet switch (cluster, management or storage).

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

The `system switch ethernet create` command manually configures and enables the health monitoring of a specified Ethernet switch of type: cluster, management, or storage. This command might be needed when ONTAP is unable to automatically discover and initiate monitoring of a switch that is advertising its presence using either the Cisco Discovery Protocol (CDP) or the Link Layer Discovery Protocol (LLDP). To identify which switches are currently monitored, use the [system switch ethernet show](#) command. If this was a previously

discovered or manually added switch within the past 7 days, hourly AutoSupport® log collection might automatically resume.

## Parameters

### **-device <text> - Device Name**

Name of the switch intended for monitoring. ONTAP utilizes this device name to recognize the SNMP agent it needs to interact with.

### **-address <IP Address> - IP Address**

IP address of the switch's management interface. This address is used as the destination of SNMP traffic and SSH connections for the purpose of monitoring and log collection, respectively.

### **-snmp-version {SNMPv1|SNMPv2c|SNMPv3} - SNMP Version**

SNMP version that ONTAP employs for sending SNMP requests for monitoring purposes. By default, SNMPv2c is used, as established by the Reference Configuration File (RCF) applied to the switch.

### **-community-or-username <text> - SNMPv2c Community String or SNMPv3 Username**

Community string used for SNMPv2 authentication, or the SNMPv3 username for SNMPv3 security. By default, the community string for SNMPv2 authentication is set to `cshml!`, as determined by the RCF that is applied to the switch. If SNMPv3 is used, the switch must be configured with the SNMPv3 username.

### **-model**

**{NX5010|NX5020|CAT2960|OTHER|NX5596|CN1610|CN1601|NX3132|NX5548|NX3132V|OT9332|NX3132XL|NX3232C} - Model Number**

Model of the switch. Use the OTHER option when adding a switch that requires an Ethernet switch health monitor XML configuration file, such as the BES-53248, MSN2100-CB2FC, MSN2100-CB2RC, N9K-C92300YC, and N9K-C9336C-FX2 switches. Be aware that the OTHER option selected during creation is different from the OTHER displayed by the `system switch ethernet show` command. In this show command, OTHER indicates that a switch is not supported for health monitoring.

### **-type {cluster-network|management-network|storage-network} - Switch Network**

Switch type: `cluster-network`, `storage-network`, or `management-network`.

### **[-is-monitoring-enabled-admin {true|false}] - Enable Switch Monitoring**

Monitoring status selected by the administrator, which is set to `true` by default when not specified. During maintenance periods, a switch not manually added might be repeatedly discovered and dropped, which could potentially generate unnecessary alerts if monitoring is enabled by default. In such cases, setting this parameter to `false` disables the monitoring process.

## Examples

Example 1: Initiates Ethernet switch health monitoring for a Cisco Nexus 3132Q-V cluster switch named SwitchA.

```
cluster1::> system switch ethernet create -device SwitchA -address 1.2.3.4
-snmp-version SNMPv2c -community-or-username cshml! -model NX3132V -type
cluster-network
```

Example 2: Initiates Ethernet switch health monitoring for a NVIDIA SN2100 storage switch named SwitchB, with the SNMPv3 username snmpv3u1.

```
cluster1::> system switch ethernet create -device SwitchB -address 5.6.7.8
-snmpp-version SNMPv3 -community-or-username snmpv3u1 -model OTHER -type
storage-network
```

## Related Links

- [system switch ethernet show](#)

## system switch ethernet delete

Delete information about an Ethernet switch (cluster, management or storage).

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

## Description

The `system switch ethernet delete` command is used to disable the health monitoring of a specified Ethernet switch. By default, this command only disables monitoring but keeps the switch visible in the list of switches. However, if the `force` parameter is used, it will completely remove the switch entry from the list. Without the `force` parameter, the Ethernet switch can still be seen using the [system switch ethernet show-all](#) command, but it will not be under active monitoring.

## Parameters

### **-device <text> - Device Name**

Name of the Ethernet switch that you want to modify or delete.

### **[-force <>true>] - Force Delete (privilege: advanced)**

This parameter, when specified, forces the delete operation. This results in the complete removal of the switch entry from the list of monitored and unmonitored switches. Note: Using this parameter might cause the switch entry to reappear if the device is rediscovered.

## Examples

Example 1: Disable monitoring for a switch named SwitchA.

```
cluster1::> system switch ethernet delete -device SwitchA
```

Example 2: Forcefully disable monitoring and remove the switch named SwitchB from the list.

```
cluster1::*> system switch ethernet delete -device SwitchB -force
```

## Related Links

- [system switch ethernet show-all](#)

# system switch ethernet modify

Modify information about an Ethernet switch's configuration

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

## Description

The `system switch ethernet modify` command is used to modify the settings of an Ethernet switch for health monitoring purposes. This command allows you to adjust various parameters related to the switch, including its device name, IP address, SNMP version, SNMPv2c community or SNMPv3 username, model, type, and monitoring status.

## Parameters

### **-device <text> - Device Name**

Name of the Ethernet switch that you want to modify. ONTAP utilizes this device name to recognize the SNMP agent it needs to interact with.

### **[-address <IP Address>] - IP Address**

IP address of the switch's management interface. This address is used as the destination of SNMP traffic and SSH connections for the purpose of monitoring and log collection, respectively.

### **[-snmp-version {SNMPv1|SNMPv2c|SNMPv3}] - SNMP Version**

SNMP version that ONTAP employs for sending SNMP requests for monitoring purposes. By default, SNMPv2c is used, as established by the Reference Configuration File (RCF) applied to the switch.

### **[-community-or-username <text>] - SNMPv2c Community String or SNMPv3 Username**

Community string used for SNMPv2 authentication, or the SNMPv3 username for SNMPv3 security. By default, the community string for SNMPv2 authentication is set to `csHm1!`, as determined by the RCF that is applied to the switch. If SNMPv3 is used, the switch must be configured with the SNMPv3 username.

### **[-type {cluster-network|management-network|storage-network}] - Switch Network**

Switch type: `cluster-network`, `storage-network`, or `management-network`.

### **[-is-monitoring-enabled-admin {true|false}] - Enable Switch Monitoring**

Monitoring status selected by the administrator, which is set to `true` by default when not specified. During maintenance periods, a switch not manually added might be repeatedly discovered and dropped, which could potentially generate unnecessary alerts if monitoring is enabled by default. In such cases, setting this parameter to `false` disables the monitoring process.

## Examples

Example 1: Modifies the IP address for the switch named SwitchA. All other settings of the switch are preserved.

```
cluster1::> system switch ethernet modify -device SwitchA -address 2.3.4.5
```

Example 2: Modifies the SNMP parameters for the switch named SwitchB. All other settings are preserved.

```
cluster1::> system switch ethernet modify -device SwitchB -snmp-version  
SNMPv3 -community-or-username snmpv3u1
```

## system switch ethernet show-all

Displays the list of switches that were added and deleted

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

### Description

The `system switch ethernet show-all` command displays configuration details for discovered monitored Ethernet switches (cluster, management and storage), including switches that are user-deleted. From the list of deleted switches, you can delete a switch permanently from the database to re-enable automatic discovery of that switch.

### Parameters

**{ [-fields <fieldname>,...]**

Selects the fields that have the specified name.

**| [-instance ] }**

Selects detailed information for all the switches.

**[-device <text>] - Device Name (privilege: advanced)**

Selects the switches that match the specified device name.

**[-address <IP Address>] - IP Address (privilege: advanced)**

Selects the switches that match the specified IP address.

**[-snmp-version {SNMPv1|SNMPv2c|SNMPv3}] - SNMP Version (privilege: advanced)**

Selects the switches that match the specified SNMP version.

**[-community-or-username <text>] - SNMPv2c Community String or SNMPv3 Username (privilege: advanced)**

Selects the switches that match the specified community string or SNMPv3 username.

**[-discovered {true|false}] - Is Discovered (privilege: advanced)**

Selects the switches that match the specified discovery setting.

**[-type {cluster-network|management-network|storage-network}] - Switch Network (privilege: advanced)**

Selects the switches that match the specified switch type.

**[-sw-version <text>] - Software Version (privilege: advanced)**

Selects the switches that match the specified software version.

**[-is-monitoring-enabled-operational {true|false}] - Switch Monitoring Status (privilege: advanced)**

Selects the switches that match the specified operational monitoring status.

**[-reason <text>] - Reason For Not Monitoring (privilege: advanced)**

Selects the switches that match the specified reason.

**[-version-source <text>] - Source Of Switch Version (privilege: advanced)**

Selects the switches that match the specified version source (for example, from SNMP, CDP or ISDP).

**[-rcf-version <text>] - Reference Config File Version (privilege: advanced)**

Selects the switches that match the specified reference configuration file version.

**[-serial-number <text>] - Serial Number of the Device (privilege: advanced)**

Selects the switches that match the specified serial number.

**[-model <text>] - Model to display (privilege: advanced)**

Selects the switches that match the specified model number.

## Examples

```
cluster1::> system switch ethernet show-all
Switch                               Type                               Address                               Model
-----
SwitchA                               cluster                             1.2.3.4
Nexus5010

      Is Monitored: yes
          Reason:
Software Version: Cisco IOS 4.1N1
Version Source: CDP
```

The example above displays the configuration of all Ethernet switches (cluster, management and storage).

## system switch ethernet show

Display the configuration for Ethernet switches (cluster, management and storage).

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

The `system switch ethernet show` command displays configuration details for the monitored Ethernet



switches (cluster, management and storage).

## Parameters

**{ [-fields <fieldname>,...]**

Selects the fields that have the specified name.

**| [-banner ]**

Displays the following information about a switch:

- Device Name
- Banner seen when accessing the switch through SSH.

**| [-snmp-config ]**

Displays the following information about a switch:

- Device Name
- SNMPv2c Community String or SNMPv3 Username
- SNMP Version

**| [-status ]**

Displays the following status information about a switch:

- Is Discovered
- SNMPv2c Community String or SNMPv3 Username
- Model Number
- Switch Network
- Software Version
- Reason For Not Monitoring
- Source Of Switch Version
- Is Monitored ?

**| [-instance ] }**

Selects detailed information for all the switches.

**[-device <text>] - Device Name**

Selects the switches that match the specified device name.

**[-address <IP Address>] - IP Address**

Selects the switches that match the specified IP address.

**[-snmp-version {SNMPv1|SNMPv2c|SNMPv3}] - SNMP Version**

Selects the switches that match the specified SNMP version.

**[-is-discovered {true|false}] - Is Discovered**

Selects the switches that match the specified discovery setting.

**[-community-or-username <text>] - SNMPv2c Community String or SNMPv3 Username**

Selects the switches that match the specified SNMPv2c community string or SNMPv3 username.

**[-model**

**{NX5010 | NX5020 | CAT2960 | OTHER | NX5596 | CN1610 | CN1601 | NX3132 | NX5548 | NX3132V | OT9332 | NX3132XL | NX3232C} ] - Model Number**

Selects the switches that match the specified model number.

**[-type {cluster-network | management-network | storage-network}] - Switch Network**

Selects the switches that match the specified switch type.

**[-sw-version <text>] - Software Version**

Selects the switches that match the specified software version.

**[-reason <text>] - Reason For Not Monitoring**

Selects the switches that match the specified reason.

**[-version-source <text>] - Source Of Switch Version**

Selects the switches that match the specified version source (for example, from SNMP, CDP or ISDP).

**[-is-monitoring-enabled-admin {true|false}] - Enable Switch Monitoring**

Selects the switches that match the specified admin monitoring status.

**[-is-monitoring-enabled-operational {true|false}] - Is Monitored ?**

Selects the switches that match the specified operational monitoring status.

**[-serial-number <text>] - Serial Number of the Device**

Selects the switches that match the specified serial number.

**[-device-banner <text>] - Device Banner**

Banner seen when accessing the switch through SSH.

## Examples

```

cluster1::> system switch ethernet show
Switch                               Type                               Address                               Model
-----                               -
cn1610-143--234                      cluster-network                    10.238.143.234                      CN1610
  Serial Number: 20211200007
  Is Monitored: true
  Reason:
  Software Version: 1.1.0.1
  Version Source: ISDP
cn1601--143-230                      management-network                 10.238.143.230                      CN1601
  Serial Number: 20210200019
  Is Monitored: false
  Reason: Monitoring Disabled by Default
  Software Version: 1.1.0.1
  Version Source: ISDP
cn1601--143-232                      management-network                 10.238.143.232                      CN1601
  Serial Number: 20210200017
  Is Monitored: false
  Reason: Monitoring Disabled by Default
  Software Version: 1.1.0.1
  Version Source: ISDP
cn1610-143--231                      cluster-network                    10.238.143.231                      CN1610
  Serial Number: 20211200002
  Is Monitored: true
  Reason:
  Software Version: 1.1.0.1
  Version Source: ISDP

```

The example above displays the configuration of all Ethernet switches (cluster, management and storage).

```

cluster1::> system switch ethernet show -snmp-config
SNMPv2c Community
Switch          or SNMPv3 Username          SNMP Version
-----
SwitchA        public                      SNMPv2c

```

The example above displays the SNMPv2c community string or SNMPv3 username and SNMP version for all Ethernet switches (cluster, management and storage).

```
cluster1::> system switch ethernet show -banner
Device: SwitchA
-----
```

```
*****
****
*
* NetApp Reference Configuration File (RCF)
* Switch      : SwitchModel
* Filename    : SwitchType-RCF-v1.8-Cluster
* Release Date : Apr-04-2022
* Version     : v1.8
*
*****
****
```

The example above shows the SSH banner for all the Ethernet switches (cluster, management, and storage).

## system switch ethernet fan show

Display fan information for Ethernet switches (cluster, management and storage).

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

The `system switch ethernet fan show` command displays the status of fans on the monitored Ethernet switches.

### Parameters

**{ [-fields <fieldname>,...]**

Selects the specified fields.

**| [-instance ] }**

Displays detailed information for all fans on all switches.

**[-device <text>] - Switch Name**

Selects the fans that belong to the specified switch.

**[-fan-name <text>] - Fan or Fan Tray Name**

Selects the fans that match the specified fan name or fan tray name.

**[-index <integer>] - Sensor Index**

Selects the fans that match the specified sensor index.

**[`-fan-type` {`single`|`tray`}] - Single Fan or Fan Tray**

Selects the fans that match the specified fan type.

**[`-fan-status` {`operational`|`failed`|`not-operational`|`not-present`|`unknown`}] - Fan Status**

Selects the fans that match the specified operational status.

**[`-display-name` <text>] - Fan Display Name**

Selects the fans that match the specified display name.

**[`-unique-name` <text>] - Fan Unique Name**

Selects the fan that matches the specified unique name.

**[`-container-name` <text>] - Fan Container Name**

Selects the fans that match the specified container name.

**[`-is-psu-fan` {`yes`|`no`}] - Is Power Supply Unit Fan**

Selects the fans that are PSU fans (`yes`) or are not PSU fans (`no`).

**[`-monitor` {`node-connect`|`system-connect`|`system`|`controller`|`chassis`|`cluster-switch`|`example`|`ethernet-switch`}] - Health Monitor**

Selects the fans that the specified health monitor continuously monitors.

**[`-error-description` <text>] - Error Description**

Selects the fans that match the specified error description.

**[`-status` {`ok`|`ok-with-suppressed`|`degraded`|`unreachable`|`unknown`}] - Resource Status**

Selects the fans that match the specified status.

## Examples

```
cluster1::> system switch ethernet fan show
```

```
Switch: SwitchA
```

Fan	Type	Fan Status	Container	Is PSU	Error
Fan Module-1	tray	operational	FanBay-1	no	
Fan Module-2	tray	operational	FanBay-2	no	

```
Switch: SwitchB
```

Fan	Type	Fan Status	Container	Is PSU	Error
Fan Module-1	tray	operational	FanBay-1	no	
Fan Module-2	tray	operational	FanBay-2	no	

The above example displays the fans and their status on the switches names SwitchA and SwitchB.

## system switch ethernet interface show

Display interface information for Ethernet switches (cluster, management and storage).

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

The `system switch ethernet interface show` command displays the status and configuration of network interfaces on the monitored switches.

### Parameters

`{ [-fields <fieldname>,...]`

Selects the fields that you specify.

`| [-counters ]`

Displays the current status of the following network counters:

- in-octets
- in-errors

- in-discards
- out-octets
- out-errors
- out-discards

**[`-instance` ] }**

Displays detailed interface configuration for all monitored Ethernet switches

**[`-device` <text>] - Switch Name**

Selects the interface ports that belong to the specified switch.

**[`-interface-name` <text>] - Interface Name**

Selects the interface ports that match the specified interface name.

**[`-index` <integer>] - Interface Index**

Selects the interface ports that match the specified interface index.

**[`-type` <interface type>] - Interface Type**

Selects the interface ports that match the specified interface type.

**[`-mtu` <integer>] - MTU**

Selects the interface ports that match the specified maximum transfer unit.

**[`-duplex-type` {unknown|half-duplex|full-duplex}] - Duplex Settings**

Selects the interface ports that match the specified duplex setting.

**[`-speed` <integer>] - Interface Speed(Mbps)**

Selects the interface ports that match the specified interface speed in bits per second.

**[`-admin-state` {up|down|testing}] - Administrative Status**

Selects the interface ports that match the specified administrative status of the switch interface.

**[`-oper-state` {up|down|testing|unknown|dormant|not-present|lower-layer-down}] - Operational Status**

Selects the interface ports that match the specified operational status.

**[`-is-isl` {yes|no}] - Is ISL**

Selects the interface ports that are Inter-Switch links (yes) or are not Inter-Switch links (no).

**[`-in-octets` <Counter>] - Input Octets**

Selects the interface ports that match the specified number of octets entering the interface.

**[`-in-errors` <Counter>] - Input Errors**

Selects the interface ports that match the specified number of input packets that were dropped due to errors.

**[`-in-discards` <Counter>] - Input Discards**

Selects the interface ports that match the specified number of input packets that were silently discarded (possibly due to buffer overflow).

**[-out-octets <Counter>] - Output Octets**

Selects the interface ports that match the specified number of octets that exited the interface.

**[-out-errors <Counter>] - Output Errors**

Selects the interface ports that match the specified number of output packets that were dropped due to errors.

**[-out-discards <Counter>] - Output Discards**

Selects the interface ports that match the specified number of output packets that were silently discarded (possibly due to buffer overflow).

**[-interface-number <integer>] - Interface Number**

Selects the interface ports that match the specified interface number.

**[-unique-name <text>] - Interface Unique Name**

Selects the interface port that matches the specified unique name.

**[-display-name <text>] - Interface Display Name**

Selects the interface ports that match the specified display name.

**[-status {ok|ok-with-suppressed|degraded|unreachable|unknown}] - Port Config Status**

Selects the interface ports that match the specified status.

**[-monitor {node-connect|system-connect|system|controller|chassis|cluster-switch|example|ethernet-switch}] - Health Monitor**

Selects the interface ports that the specified health monitor continuously monitors.

**[-switch-type {cluster-network|management-network|storage-network}] - Switch Network**

Selects the interface ports that match the specified switch type.

**[-remote-port-mtu <integer>,...] - MTU of Remote Port**

Selects the interface ports that match the specified remote port mtu.

**[-remote-port-name <text>] - Remote Port Name**

Selects the interface ports that match the specified remote port name.

**[-remote-device <text>] - Remote Device Name**

Selects the interface ports that match the specified remote device.

**[-model <text>] - Switch Model**

Selects the interface ports that match the specified model.

**[-mac-address <text>] - MAC Address**

Selects the interface ports that match the specified mac address.

**[-vlan-id <text>] - Vlan ID**

Selects the interface ports that match the specified vlan id.



## **[-if-alias <text>] - Interface Alias**

Selects the interface ports that match the specified interface alias.

### **Examples**

```
cluster1::> system switch ethernet interface show

Switch: SwitchA
Opera-
      Num-
Interface ber  Index      Type      Admin  tional  Is
Speed                                     Status Status  ISL  MTU  Duplex
-----
-----
Ethernet1/  1 436207616 ethernetC up      up      no   1500 full-
40000
1          smacd                                duplex

Ethernet1/ 10 436244480 ethernetC up      down    no   1500 full-
40000
10          smacd                                duplex

Switch: SwitchB
Opera-
      Num-
Interface ber  Index      Type      Admin  tional  Is
Speed                                     Status Status  ISL  MTU  Duplex
-----
-----
Ethernet1/  1 436207616 ethernetC up      up      no   1500 full-
40000
1          smacd                                duplex

Ethernet1/ 10 436244480 ethernetC up      down    no   1500 full-
40000
10          smacd                                duplex
```

The example above displays the interfaces on all Ethernet switches (cluster, management and storage).

```

cluster1::> system switch ethernet interface show -counters

Switch: SwitchA
In          Out          Out
Interface   In Octets  In Errors  Discards   Out Octets  Errors
Discards
-----
-----
Ethernet1/1  1856922869  177091    0          3122212606  0
2

Ethernet1/  3242386021          0          0          1408092011  0
74
10

Switch: SwitchB
In          Out          Out
Interface   In Octets  In Errors  Discards   Out Octets  Errors
Discards
-----
-----
Ethernet1/1  1281177979  182012    0          3271353786  0
1

Ethernet1/  3611218526          0          0          2626671058  0
0
10

```

The example above displays the counters on switch network interfaces for all the Ethernet switches (cluster, management and storage).

## system switch ethernet log collect

Collect Ethernet switch log via openSSH.

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

The `system switch ethernet log collect` command initiates the collection of an Ethernet switch log for the specified Ethernet switch via OpenSSH.



Log files are removed during takeover or giveback operations.

## Parameters

**-device <text> - Switch Name**

Specifies the Ethernet switch device for which the log collection is being made.

## Examples

```
cluster1::> system switch ethernet log collect -device cluster-sw1
```

## system switch ethernet log disable-collection

Disable Ethernet switch log collection via openSSH.

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

The `system switch ethernet log disable-collection` command disables the collection of Ethernet switch logs via OpenSSH.

### Examples

```
cluster1::> system switch ethernet log disable-collection
```

## system switch ethernet log enable-collection

Enable Ethernet switch log collection via openSSH.

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

The `system switch ethernet log enable-collection` command enables the collection of Ethernet switch logs via OpenSSH.

### Examples

```
cluster1::> system switch ethernet log enable-collection
```

## system switch ethernet log modify

Modify the Ethernet switch log request.

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

## Description

The `system switch ethernet log modify` command modifies the log request of the specified Ethernet switch.

## Parameters

### **-device <text> - Switch Name**

Specifies the Ethernet switch device for which the log request is being made. Note: the device must be one of the devices listed as an Ethernet switch from the [system switch ethernet show](#) command. The full device name from the [system switch ethernet show](#) command must be used.

### **[-log-request {true|false}] - Requested Log**

Specifies the initiation of a switch log retrieval for the specified Ethernet switch if set to true.

## Examples

```
cluster1::> system switch ethernet log modify -device switch-  
name01(Switch---SN) -log-request true
```

Modifies the log request for the specified Ethernet switch. Setting the log-request to true initiates an Ethernet switch log retrieval for the specified switch.

## Related Links

- [system switch ethernet show](#)

# system switch ethernet log setup-password

Obtain Ethernet switch admin passwords.

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

## Description

The `system switch ethernet log setup-password` command allows the administrator to set up Ethernet switch health monitor access to certain Ethernet switches, so that switch logs can be collected.

## Examples

```
cluster1::> system switch ethernet log setup-password  
    Enter the switch name: (use full name from system switch  
ethernet show)  
    Enter the password: (Enter admin password of switch)  
    Enter the password again: (Enter admin password of switch)  
cluster1::>
```

Enables setup of switch log collection for the specified Ethernet switch.

## system switch ethernet log show

Display Ethernet switch log information.

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

The `system switch ethernet log show` command displays the status and requests for Ethernet switch logs.

### Parameters

**{ [-fields <fieldname>,...]**

If you specify the `-fields <fieldname>, ...` parameter, the command output also includes the specified field or fields. You can use `'-fields ?'` to display the fields to specify.

**| [-instance ] }**

Specifies an instance of the Ethernet switch devices log status.

**[-device <text>] - Switch Name**

Specifies the name of the Ethernet switch device to display log status on.

**[-log-request {true|false}] - Requested Log**

Specifies the state of the log request for an Ethernet switch device. Values: true, false.

**[-log-status <text>] - Log Status**

Specifies the status of the log request for an Ethernet switch device.

**[-log-timestamp <MM/DD/YYYY HH:MM:SS>] - Log Timestamp**

Specifies the completion timestamp of the log request for an Ethernet switch device.

**[-idx <integer>] - Index**

Specifies the index of the Ethernet switch device.

**[-filename <text>] - Filename**

Specifies the full filename of the Ethernet switch log.

**[-filenode <text>] - File Node**

Specifies the name of the controller on which the Ethernet switch log resides.

### Examples

```

cluster1::> system switch ethernet log show
Log Collection Enabled: true
Index Switch                               Log Timestamp                               Status
-----
1 switch-name01 (Switch---SN)             -                                             -
2 switch-name02 (Switch---SN)             -                                             -

```

Displays the Ethernet switches, their last log timestamp, and the status of the last log request.

## system switch ethernet polling-interval modify

Modify the polling interval for Ethernet switch health

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

### Description

The `system switch ethernet polling-interval modify` command modifies the interval in which the Ethernet switch health monitor polls cluster, management and storage switches.

### Parameters

#### `[-polling-interval <integer>]` - Polling Interval

Specifies the interval in which the health monitor polls switches. The interval is in minutes. The default value is 5. The allowed range of values is 2 to 120.

### Examples

```

cluster1::> system switch ethernet polling-interval modify -polling
-interval 41

```

Modifies the polling interval of the switches.

## system switch ethernet polling-interval show

Display the polling interval for monitoring Ethernet switch health

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

The `system switch ethernet polling-interval show` command displays the polling interval used by the Ethernet switch health monitor.

## Examples

```
cluster1::> system switch ethernet polling-interval show
Polling Interval (in minutes): 40
```

The example above displays the polling interval period for the switches.

## system switch ethernet power show

Display power information for Ethernet switches (cluster, management and storage).

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

The `system switch ethernet power show` command displays the power supply status of the monitored Ethernet switches.

### Parameters

**{ [-fields <fieldname>,...]**

Selects the fields with the names that you specify.

**| [-instance ] }**

Displays detailed power supply information for all the switches.

**[-device <text>] - Switch Name**

Selects the PSUs that belong to the specified switch.

**[-psu-name <text>] - Power Supply Name**

Selects the PSUs that match the specified power supply name.

**[-oper-status {operational|failed|not-operational|not-present|unknown}] - Operational Status**

Selects the PSUs that match the specified operational status.

**[-error-description <text>] - Error Description**

Selects the PSUs that match the specified error description.

**[-display-name <text>] - Power Supply Display Name**

Selects the PSUs that match the specified display name.

**[-unique-name <text>] - Power Supply Unique Name**

Selects the PSU that matches the specified unique name.

## **[*-status* {*ok*|*ok-with-suppressed*|*degraded*|*unreachable*|*unknown*}] - Power Supply Resource Health**

Selects the PSUs that match the specified status.

## **[*-monitor* {*node-connect*|*system-connect*|*system*|*controller*|*chassis*|*cluster-switch*|*example*|*ethernet-switch*}] - Health Monitor**

Selects the PSUs that match the specified monitor type.

## **[*-admin-status* {*on*|*off*|*not-defined*|*unknown*}] - Administrative Status**

Selects the PSUs that match the specified administrative status for the power supply.

## **Examples**

```
cluster1::> system switch ethernet power show
Switch                Power Supply      Admin      Operational
                    Status            Status      Error
-----
SwitchA               PowerSupply-1     on         operational
SwitchA               PowerSupply-2     on         operational
```

The example above displays the power-supply status for all Ethernet switches (cluster, management and storage).

## **system switch ethernet switch-count show**

Display the count of cluster-network, management-network and storage-network switches.

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

## **Description**

The `system switch ethernet switch-count show` command displays the Ethernet switch redundancy status of the cluster that the Ethernet switch health monitor is monitoring.

## **Parameters**

**{ [*-fields* <fieldname>,...]**

If you specify the `-fields <fieldname>,...` parameter, the command displays the fields that you specify.

**| [*-instance* ] }**

If you specify the `-instance` parameter, the command displays detailed power supply information for all the switches.

**[*-unique-name* <text>] - Cluster Unique Name**

Displays the cluster name whose Ethernet switch redundancy is monitored.



**[-clus-switch-count <integer>] - Ethernet Switch Count**

Displays the count of cluster network switches in the cluster.

**[-mgmt-switch-count <integer>] - Management Switch Count**

Displays the count of management network switches in the cluster.

**[-switchless-config {true|false}] - 2-Node Switchless**

Displays whether the cluster is in switchless cluster configuration or not.

**[-monitor {node-connect|system-connect|system|controller|chassis|cluster-switch|example|ethernet-switch}] - Health Monitor**

Displays the health monitor monitoring this cluster network switch redundancy information of the cluster.

**[-status {ok|ok-with-suppressed|degraded|unreachable|unknown}] - Ethernet Switch Redundancy Status**

Displays the Ethernet switch redundancy status of the cluster.

**[-display-name <text>] - Cluster Display Name**

Displays the cluster name whose Ethernet switch redundancy is monitored.

**[-stor-switch-count <integer>] - Storage Switch Count**

Displays the count of storage network switches in the cluster.

## Examples

```
cluster1::*> system switch ethernet switch-count show
Cluster      Management Storage  Switchless
Sw Count    Sw Count   Sw Count Config
-----
2           1           2         false
```

Shows the count of Ethernet switches (including cluster, management and storage networks) and the switchless configuration status of the cluster.

## system switch ethernet temperature show

Display temperature information for Ethernet switches (cluster, management and storage).

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

The `system switch ethernet temperature show` command displays the temperature status of switches monitored by the Ethernet switch health monitor.

## Parameters

**{ [-fields <fieldname>,...]**

If you specify the `-fields <fieldname>`, ... parameter, the command output also includes the specified field or fields. You can use `'-fields ?'` to display the fields to specify.

**| [-instance ] }**

If you specify the `-instance` parameter, the command displays detailed information about all fields.

**[-device <text>] - Switch Name**

Selects the temperature sensors that belong to the specified switch.

**[-sensor-name <text>] - Sensor Name**

Selects the temperature sensors that match the specified temperature sensor name.

**[-index <integer>] - Sensor Index**

Selects the temperature sensors that match the specified sensor index.

**[-temperature <integer>] - Temperature in Celsius**

Selects the temperature sensors whose readings match the specified temperature value.

**[-threshold-severity**

**{Unknown|Other|Information|Degraded|Minor|Major|Critical|Fatal}] - Threshold Severity**

Selects the temperature sensors that match the specified threshold severity.

**[-threshold-value <integer>,...] - Threshold Value**

Selects the temperature sensors that match the specified threshold value.

**[-sensor-status {normal|warning|alert|critical|not-present|not-operational|unknown}] - Temperature Status**

Selects the temperature sensors that match the specified operational status.

**[-display-name <text>] - Sensor Display Name**

Selects the temperature sensors that match the specified sensor display name.

**[-unique-name <text>] - Sensor Unique Name**

Selects the temperature sensor that matches the specified unique name.

**[-monitor {node-connect|system-connect|system|controller|chassis|cluster-switch|example|ethernet-switch}] - Health Monitor**

Selects the temperature sensors that the specified health monitor continuously monitors.

**[-error-description <text>] - Error Description**

Selects the temperature sensors that match the specified fault error description.

**[-status {ok|ok-with-suppressed|degraded|unreachable|unknown}] - Resource Status**

Selects the temperature sensors that match the specified status.

## Examples

```
cluster1::> system switch ethernet temperature show
                Threshold Threshold
Switch  Sensor      Reading Severity  Value      Status  Error
-----
SwitchA "Module-1, Intake-1"
                24      Minor, Major
                40, 50      normal
SwitchA "Module-1, Intake-2"
                23      Minor, Major
                40, 50      normal
```

The example above displays temperature status for all Ethernet switches (cluster, management and storage).

## system switch ethernet threshold show

Display the Ethernet switch health monitor alert thresholds

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

The `system switch ethernet threshold show` command displays thresholds used by health monitor alerts.

## Examples

```
cluster1::> system switch ethernet threshold show
Errors/Utilization Threshold is per 0.10% values: 1 = 0.10%, 5 = 0.50%
Entity-alert Threshold is the count needed to raise entity warning
alert
Errors          Bandwidth
Threshold (0.1%) Threshold (0.1%) Entity-alert
In      Out      In      Out      Threshold
-----
                1      1      900      900      2
```

Displays the inbound and outbound switch interface packet error thresholds which are set at 0.1%, and the inbound and outbound switch interface bandwidth utilization thresholds which are set at 90%. Also displays the threshold value for entity warning alerts. The node platform health monitor also shares the same thresholds for monitoring cluster port packet errors on the node.

# system switch fibre-channel add

Add a back-end fibre-channel switch for monitoring

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

## Description

The `system switch fibre-channel add` command enables you to add fibre-channel (FC) switches for SNMP monitoring in a MetroCluster configuration. Front end switches should not be added for monitoring and will result in a Monitor Status Error condition.

## Parameters

### **-address <IP Address> - FC Switch Management IP Address**

This parameter specifies the IP address of the back-end FC switch that is added for monitoring.

### **[-snmp-version {SNMPv1|SNMPv2c|SNMPv3}] - Supported SNMP Version**

This parameter specifies the SNMP version that ONTAP uses to communicate with the back-end FC switch that is added for monitoring. The default SNMP version is SNMPv2c.

### **[-snmp-community-or-username <text>] - SNMPv2c Community or SNMPv3 Username**

This parameter specifies the SNMPv2c community set or SNMPv3 username on the switch that is added for monitoring.

### **[-veto-backend-fabric-check {true|false}] - Veto Back-end Fabric Check? (privilege: advanced)**

If specified, the `system switch fibre-channel add` command will not check if the switch is present in the MetroCluster's back-end fabric. By default, it does not let you add switches that are not present.

### **[-blades <integer>,...] - Cisco Director Class Switch Blades to Monitor**

This parameter specifies the blades to monitor on the back-end switch that is added for monitoring. It is only applicable to director-class switches.

## Examples

The following command adds a back-end switch with IP Address 10.226.197.34 for monitoring:

```

cluster1::> system switch fibre-channel add -address 10.226.197.34 -snmp
-community-or-username public
cluster1::> system switch fibre-channel show

```

Monitor	Symbolic	Is				
Switch	Name	Vendor	Model	Switch WWN	Monitored	Status
Cisco_10.226.197.34	mcc-cisco-8Gb-fab-4	Cisco	DS-C9148-16P-K9	2000547fee78f088	true	ok
mcc-cisco-8Gb-fab-1	mcc-cisco-8Gb-fab-1	Cisco	-	-	false	-
mcc-cisco-8Gb-fab-2	mcc-cisco-8Gb-fab-2	Cisco	-	-	false	-
mcc-cisco-8Gb-fab-3	mcc-cisco-8Gb-fab-3	Cisco	-	-	false	-

```

4 entries were displayed.
cluster1::>

```

The following command adds a Cisco Director Class switch for monitoring. ONTAP uses SNMPv3 and 'snmpuser1' username to communicate with this switch.

```

cluster1::> system switch fibre-channel add -address 10.228.56.208 -snmp
-version SNMPv3 -snmp-community-or-username snmpuser1 -blades 3,4

```

## system switch fibre-channel modify

Modify information about a back-end fibre-channel switch's configuration

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

The `system switch fibre-channel modify` command enables you to modify certain parameters for identifying and accessing the back-end fibre-channel (FC) end switches added for monitoring in a MetroCluster configuration.

## Parameters

**-switch-name <text> - FC Switch Name**

This parameter specifies the name of the switch.

**[-snmp-version {SNMPv1|SNMPv2c|SNMPv3}] - SNMP Version**

This parameter specifies the SNMP version that ONTAP uses to communicate with the switch.

**[-switch-ipaddress <IP Address>] - Switch IP Address**

This parameter specifies the IP address of the switch.

**[-snmp-community-or-username <text>] - SNMPv2c Community or SNMPv3 Username**

This parameter specifies the SNMPv2c community set or SNMPv3 username on the switch.

**[-blades <integer>,...] - Director-Class Switch Blades to Monitor**

This parameter specifies the blades to monitor on the switch. It is only applicable to director-class switches.

## Examples

The following command modifies Cisco\_10.226.197.34 switch SNMP community to 'public':

```
cluster1::> system switch fibre-channel modify -switch-name
Cisco_10.226.197.34 -switch-ipaddress 10.226.197.34 -snmp-community-or
-username public
cluster1::>
```

The following command modifies the blades monitored on a director-class switch:

```
cluster1::> system switch fibre-channel modify -switch-name
Cisco_10.228.56.208 -blades 3,4
cluster1::>
```

The following command modifies Brocade 6505 switch SNMP version to SNMPv3 and SNMPv3 username to 'snmpuser1':

```
cluster1::> system switch fibre-channel modify -switch-name Brocade6505
-switch-ipaddress 10.226.197.34 -snmp-version SNMPv3 -snmp-community-or
-username snmpuser1
cluster1::>
```

## system switch fibre-channel refresh

Refresh back-end fibre-channel switch info

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

## Description

The `system switch fibre-channel refresh` command triggers a refresh of the SNMP data for the MetroCluster fibre-channel (FC) switches and FC-to-SAS bridges. It does not do anything if the refresh is already going on. The FC switches and FC-to-SAS bridges must have been previously added for monitoring by using the [system switch fibre-channel add](#) and [system bridge add](#) commands, respectively.

## Examples

The following command triggers a refresh for the FC switch and FC-to-SAS bridge data:

```
cluster1::*> system switch fibre-channel refresh
cluster1::*>
```

## Related Links

- [system switch fibre-channel add](#)
- [system bridge add](#)

# system switch fibre-channel remove

Remove a back-end fibre-channel switch from monitoring

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

## Description

The `system switch fibre-channel remove` command enables you to remove back-end fibre-channel (FC) switches that were previously added for SNMP monitoring.

## Parameters

**-switch-name <text> - FC Switch Name**

This parameter specifies the name of the back-end FC switch added for monitoring.

## Examples

The following command removes 'Cisco\_10.226.197.34' switch from monitoring:

```

cluster1::> system switch fibre-channel show
      Symbolic                               Is
Monitor
  Switch      Name      Vendor  Model      Switch WWN      Monitored
Status
-----
-----
Cisco_10.226.197.34
      mcc-cisco-8Gb-fab-4
      Cisco      DS-C9148-16P-K9
      2000547fee78f088 true      ok
mcc-cisco-8Gb-fab-1
      mcc-cisco-8Gb-fab-1
      Cisco      -          -          false      -
mcc-cisco-8Gb-fab-2
      mcc-cisco-8Gb-fab-2
      Cisco      -          -          false      -
mcc-cisco-8Gb-fab-3
      mcc-cisco-8Gb-fab-3
      Cisco      -          -          false      -
4 entries were displayed.
cluster1::> system switch fibre-channel remove -switch-name
Cisco_10.226.197.34
cluster1::> system switch fibre-channel show
      Symbolic                               Is
Monitor
  Switch      Name      Vendor  Model      Switch WWN      Monitored
Status
-----
-----
mcc-cisco-8Gb-fab-4
      mcc-cisco-8Gb-fab-4
      Cisco
      -          -          false      -
mcc-cisco-8Gb-fab-1
      mcc-cisco-8Gb-fab-1
      Cisco      -          -          false      -
mcc-cisco-8Gb-fab-2
      mcc-cisco-8Gb-fab-2
      Cisco      -          -          false      -
mcc-cisco-8Gb-fab-3
      mcc-cisco-8Gb-fab-3
      Cisco      -          -          false      -
4 entries were displayed
cluster1::>

```



# system switch fibre-channel show

Display back-end fibre-channel switch information

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

## Description

The `system switch fibre-channel show` command displays information about all the back-end fibre-channel (FC) switches in the MetroCluster configuration. The back-end switches must have been previously added for monitoring using the `system switch fibre-channel add` command. If no parameters are specified, the default command displays the following information about the back-end FC switches:

- Switch
- Symbolic Name
- Vendor
- Model
- Switch WWN
- Is Monitored
- Monitor Status

To display detailed profile information about a single back-end FC switch, use the `-switch-name` parameter.

## Parameters

**{ [-fields <fieldname>,...]**

Displays the specified fields for all the back-end FC switches, in column-style output.

**| [-connectivity ]**

Displays the following details about the connectivity from the back-end FC switch to connected entities:

- Port name
- Port operating mode
- Port world wide name
- Peer port world wide name
- Peer type
- Additional information about peer

Displays the following details about the connectivity from the node to the back-end FC switch:

- Node name
- Adapter name
- Switch port name
- Switch port speed
- Adapter type

### | [**-cooling**] ]

Displays the following details about the fans and temperature sensors on the back-end FC switch:

- Fan name
- Fan speed in rotations per minute (RPM)
- Fan operational status
- Temperature sensor name
- Temperature sensor reading in Celsius °C
- Temperature sensor status

### | [**-error**] ]

Displays the errors related to the back-end FC switch.

### | [**-port**] ]

Displays the following details about the back-end FC switch ports:

- Port name
- Port world wide name
- Port administrative status
- Port operational status
- Port operating mode
- Whether SFP is present in the port
- Port speed in gigabits per second (Gbps)
- Port BB credit
- Peer port world wide name

### | [**-power**] ]

Displays the following details about the back-end FC switch power supplies:

- Power supply name
- Power supply serial number
- Power supply operational status

### | [**-san-config**] ]

Displays the following details about the Virtual Storage Area Networks (VSAN) and Zones of the back-end FC switch:

- VSAN identifier
- VSAN name
- VSAN operational status
- Type of load balancing configured for the VSAN
- Whether in-order-delivery set for the VSAN
- Whether the auto power reset of the PSU is enabled

- VAN member switch name and port
- Zone name
- VSAN ID of the zone
- Zone member switch name and port
- Zone member port id
- Zone member port world wide name

#### | [-sfp ]

Displays the following details about the back-end FC switch ports small form-factor pluggable (SFP):

- Port name
- Type of SFP
- SFP transmitter type
- SFP vendor
- SFP part number
- SFP serial number

#### | [-stats ]

Displays the following details about the back-end FC switch ports:

- Port name
- Frames received through the port (Rx Frames)
- Frames transmitted through the port (Tx Frames)
- Octets received through the port (Rx Octets)
- Octets transmitted through the port (Tx Octets)
- Port error frames

#### | [-instance ] }

Displays expanded information about all the back-end FC switches in the system. If a back-end FC switch is specified, then this parameter displays the same detailed information for the back-end FC switch you specify as does the -switch-name parameter.

#### **[-switch-name <text>] - FC Switch Name**

Displays information only about the back-end FC switches that match the name you specify.

#### **[-switch-wwn <text>] - Switch World Wide Name**

Displays information only about the back-end FC switches that match the switch wwn you specify.

#### **[-switch-symbolic-name <text>] - Switch Symbolic Name**

Displays information only about the back-end FC switches that match the switch symbolic name you specify.

#### **[-switch-fabric-name <text>] - Fabric Name**

Displays information only about the back-end FC switches that match the switch fabric you specify.

**[-domain-id <integer>] - Switch Domain ID**

Displays information only about the back-end FC switches that match the switch domain id you specify.

**[-switch-role {unknown|primary|subordinate}] - Switch Role in Fabric**

Displays information only about the back-end FC switches that match the switch role you specify.

**[-snmp-version {SNMPv1|SNMPv2c|SNMPv3}] - SNMP Version**

Displays information only about the back-end FC switches that match the switch SNMP version you specify.

**[-switch-model <text>] - Switch Model**

Displays information only about the back-end FC switches that match the switch model you specify.

**[-switch-vendor {unknown|Brocade|Cisco}] - Switch Vendor**

Displays information only about the back-end FC switches that match the switch vendor you specify.

**[-fw-version <text>] - Switch Firmware Version**

Displays information only about the back-end FC switches that match the switch firmware version you specify.

**[-serial-number <text>] - Switch Serial Number**

Displays information only about the back-end FC switches that match the switch serial number you specify.

**[-switch-ipaddress <IP Address>] - Switch IP Address**

Displays information only about the back-end FC switches that match the switch IP address you specify.

**[-switch-status {unknown|ok|error}] - Switch Status**

Displays information only about the back-end FC switches that match the switch status you specify.

**[-snmp-community-or-username <text>] - SNMPv2c Community or SNMPv3 Username**

Displays information only about the back-end FC switches that match the switch SNMPv2c community or SNMPv3 username you specify.

**[-profile-data-last-successful-refresh-timestamp {MM/DD/YYYY HH:MM:SS [{+|-}hh:mm]}] - Switch Profile Data Last Successful Refresh Timestamp**

Displays information only about the back-end FC switches that match the profile data last successful refresh timestamp you specify.

**[-is-monitoring-enabled {true|false}] - Is Monitoring Enabled for Switch**

Displays information only about the back-end FC switches that match the switch monitoring value you specify.

**[-blades <integer>,...] - Director-Class Switch Blades to Monitor**

Displays information only about the back-end FC switches that match the blade value you specify.

**[-engine-id <Hex String>] - Engine ID of SNMPv3 Capable Switch**

Displays information only about the back-end FC switches that match the SNMPv3 engine-id you specify.

**[-psu-name-list <text>,...] - Switch Power Supply Name List**

Displays information only about the back-end FC switches that have the power supply units with the names

you specify.

**[-psu-serial-number-list <text>,...] - Switch Power Supply Serial Number List**

Displays information only about the back-end FC switches that have the power supply units with the serial numbers you specify.

**[-psu-status-list {unknown|normal|warning|faulty|not-present}] - Switch Power Supply Status List**

Displays information only about the back-end FC switches that have the power supply units with the statuses you specify.

**[-psu-data-last-successful-refresh-timestamp {MM/DD/YYYY HH:MM:SS [{+|-}hh:mm]}] - Switch Power Supply Data Last Successful Refresh Timestamp**

Displays information only about the back-end FC switches that match the power supply unit data last successful refresh timestamp you specify.

**[-temp-sensor-name-list <text>,...] - Switch Temperature Sensor Name List**

Displays information only about the back-end FC switches that have the temperature sensors with the names you specify.

**[-temp-sensor-reading-list <integer>,...] - Switch Temperature Sensor Reading © List**

Displays information only about the back-end FC switches that have the temperature sensors with the readings you specify.

**[-temp-sensor-status-list {unknown|normal|warning|critical}] - Switch Temperature Sensor Status List**

Displays information only about the back-end FC switches that have the temperature sensors with the statuses you specify.

**[-temp-data-last-successful-refresh-timestamp {MM/DD/YYYY HH:MM:SS [{+|-}hh:mm]}] - Switch Temperature Sensor Data Last Successful Refresh Timestamp**

Displays information only about the back-end FC switches that match the temperature sensor data last successful refresh timestamp you specify.

**[-fan-name-list <text>,...] - Switch Fan Name List**

Displays information only about the back-end FC switches that match the fans with the names you specify.

**[-fan-rpm-list <integer>,...] - Switch Fan Speed (RPM) List**

Displays information only about the back-end FC switches that match the fans with the RPM speeds you specify.

**[-fan-status-list {unknown|operational|failed|not-operational|not-present}] - Switch Fan Operational Status List**

Displays information only about the back-end FC switches that match the fans with the statuses you specify.

**[-fan-data-last-successful-refresh-timestamp {MM/DD/YYYY HH:MM:SS [{+|-}hh:mm]}] - Switch Fan Data Last Successful Refresh Timestamp**

Displays information only about the back-end FC switches that match the fan data last successful refresh timestamp you specify.

**[-vsan-index-list <integer>,...] - Switch VSAN Index List**

Displays information only about the back-end FC switches that have the VSANs with the indexes you specify.

**[-vsan-name-list <text>,...] - Switch VSAN Name List**

Displays information only about the back-end FC switches that have the VSANs with the names you specify.

**[-vsan-oper-status-list {up|down}] - Switch VSAN Operational Status List**

Displays information only about the back-end FC switches that have the VSANs with the operational statuses you specify.

**[-vsan-load-balancing-type-list {src-id-dest-id|src-id-dest-id-ox-id}] - Switch VSAN Load balancing Type List**

Displays information only about the back-end FC switches that have the VSANs with the load balancing types you specify.

**[-is-vsan-iod-list {true|false}] - Is In-order Delivery Set for VSAN List**

Displays information only about the back-end FC switches that have the VSANs with the IOD setting you specify.

**[-vsan-data-last-successful-refresh-timestamp {MM/DD/YYYY HH:MM:SS [{+|-}hh:mm]}] - Switch VSAN Data Last Successful Refresh Timestamp**

Displays information only about the back-end FC switches that match the VSAN data last successful refresh timestamp you specify.

**[-member-switch-name-list <text>,...] - Member Switch List**

Displays information only about the back-end FC switches that have the VSANs with the member switch names you specify.

**[-member-switch-port-name-list <text>,...] - Member Switch Port Name List**

Displays information only about the back-end FC switches that have the VSANs with the member switch port names you specify.

**[-vsan-id-list <integer>,...] - Zone VSAN ID List**

Displays information only about the back-end FC switches that have the VSANs with the IDs you specify.

**[-zone-name-list <text>,...] - Switch Zone Name List**

Displays information only about the back-end FC switches that have the zones with the names you specify.

**[-zone-member-sw-domain-id-list <integer>,...] - Zone Member Switch Port Domain ID List**

Displays information only about the back-end FC switches that have the zones with the member switch domain ids you specify.

**[-zone-member-port-name-list <text>,...] - Zone Member Port List**

Displays information only about the back-end FC switches that have the zones with the port names you specify.

**[-zone-member-port-wwn-list <text>,...] - Zone Member WWPN List**

Displays information only about the back-end FC switches that have the zones with the port WWNs you

specify.

**[-zone-member-port-switch-name-list <text>,...] - Zone Member Switch WWN List**

Displays information only about the back-end FC switches that have the zones with the member port hosting switch names you specify.

**[-zone-data-last-successful-refresh-timestamp {MM/DD/YYYY HH:MM:SS [{+|-}hh:mm]}] - Switch Zone Data Last Successful Refresh Timestamp**

Displays information only about the back-end FC switches that match the zone data last successful refresh timestamp you specify.

**[-zone-member-wwn-list <text>,...] - Zone Member WWN List**

Displays information only about the back-end FC switches that have the zones with the member WWNs you specify.

**[-zone-member-port-id-list <text>,...] - Zone Member Port ID List**

Displays information only about the back-end FC switches that have the zones with the member port ids you specify.

**[-port-wwn-list <text>,...] - Switch Port World Wide Name (WWPN) List**

Displays information only about the back-end FC switches that have the ports with the WWNs you specify.

**[-port-name-list <text>,...] - Switch Port Name List**

Displays information only about the back-end FC switches that have the ports with the names you specify.

**[-port-admin-status-list {unknown|enabled|disabled}] - Switch Port Admin Status List**

Displays information only about the back-end FC switches that have the ports with administrative statuses you specify.

**[-port-oper-status-list {unknown|online|offline}] - Switch Port Operational Status List**

Displays information only about the back-end FC switches that have the ports with operational statuses you specify.

**[-port-mode-list {unknown|auto|F-port|FL-port|E-port|TE-port|U-port|G-port|other|EX-port|D-port|SIM-port|VE-port|AE-port|AF-port}] - Switch Port Mode List**

Displays information only about the back-end FC switches that have the ports with the operating modes you specify.

**[-port-oper-speed-list <integer>,...] - Switch Port Current Speed (in Gbits/sec) List**

Displays information only about the back-end FC switches that have the ports with the operational speeds you specify.

**[-port-bb-credit-list <integer>,...] - Switch Port BB Credit List**

Displays information only about the back-end FC switches that have the ports with the BB credits you specify.

**[-port-sfp-present-list {true|false}] - Switch Port Is SFP Present List**

Displays information only about the back-end FC switches that have the ports with the SFP present values you specify.

**[-port-peer-wwpn-list <text>,...] - Switch Port Peer WWPN List**

Displays information only about the back-end FC switches that have the ports with the peer port WWPNs you specify.

**[-port-data-last-successful-refresh-timestamp {MM/DD/YYYY HH:MM:SS [{+|-}hh:mm]}] - Switch Port Data Last Successful Refresh Timestamp**

Displays information only about the back-end FC switches that match the port data last successful refresh timestamp you specify.

**[-port-stat-name-list <text>,...] - Switch Port Name List**

Displays information only about the back-end FC switches that have the ports with the names you specify.

**[-port-tx-frames-list <integer>,...] - Switch Port Transmitted Frame Count List**

Displays information only about the back-end FC switches that have the ports with the transmitted frames values you specify.

**[-port-rx-frames-list <integer>,...] - Switch Port Received Frame Count List**

Displays information only about the back-end FC switches that have the ports with the received frames values you specify.

**[-port-tx-octets-list <integer>,...] - Switch Port Total Transmitted Octets List**

Displays information only about the back-end FC switches that have the ports with the transmitted octets values you specify.

**[-port-rx-octets-list <integer>,...] - Switch Port Total Received Octets List**

Displays information only about the back-end FC switches that have the ports with the received octets values you specify.

**[-port-frame-error-list <integer>,...] - Switch Port Frame Error Count List**

Displays information only about the back-end FC switches that have the ports with the error frame values you specify.

**[-port-stat-data-last-successful-refresh-timestamp {MM/DD/YYYY HH:MM:SS [{+|-}hh:mm]}] - Switch Port Stat Data Last Update Timestamp**

Displays information only about the back-end FC switches that match the port statistics data last successful refresh timestamp you specify.

**[-sfp-port-name-list <text>,...] - Switch Port Name List**

Displays information only about the back-end FC switches that have the ports with the names you specify.

**[-sfp-type-list {unknown|other|gbic|embedded|glm|gbic-with-serial-id|gbic-without-serial-id|sfp-with-serial-id|sfp-without-serial-id|xfp|x2-short|x2-medium|x2-tall|xpak-short|xpak-medium|xpak-tall|xenpak|sfp-dw-dm|qsfp|x2-dw-dm|gbic-not-installed|small-form-factor}] - Switch Port SFP Type List**

Displays information only about the back-end FC switches that have the ports with the SFP types you specify.

**[-sfp-tx-type-list {unknown|long-wave-laser|short-wave-laser|long-wave-laser-cost-reduced|electrical|ten-gig-base-sr|ten-gig-base-lr|ten-gig-base-er|ten-gig-base-lx4|ten-gig-base-sw|ten-gig-base-lw|ten-gig-base-ew}] - Switch Port SFP Transmitter Type List**



Displays information only about the back-end FC switches that have the ports with the SFP transmitter types you specify.

**[-sfp-vendor-list <text>,...] - Switch Port SFP Vendor List**

Displays information only about the back-end FC switches that have the ports with the SFP vendors you specify.

**[-sfp-part-number-list <text>,...] - Switch Port SFP Part Number List**

Displays information only about the back-end FC switches that have the ports with the SFP part numbers you specify.

**[-sfp-serial-number-list <text>,...] - Switch Port SFP Serial Number List**

Displays information only about the back-end FC switches that have the ports with the SFP serial numbers you specify.

**[-sfp-data-last-successful-refresh-timestamp {MM/DD/YYYY HH:MM:SS [{+|-}hh:mm]}] - Switch Port SFP Data Last Successful Refresh Timestamp**

Displays information only about the back-end FC switches that match the port SFP data last successful refresh timestamp you specify.

**[-switch-error-text-list <text>,...] - Switch Error Text List**

Displays information only about the back-end FC switches that have the errors you specify.

**[-conn-switch-port-name-list <text>,...] - Switch Port Name List**

Displays information only about the back-end FC switches that have the ports with the names you specify.

**[-conn-switch-port-mode-list {unknown|auto|F-port|FL-port|E-port|TE-port|U-port|G-port|other|EX-port|D-port|SIM-port|VE-port|AE-port|AF-port}] - Switch Port Operating Mode List**

Displays information only about the back-end FC switches that have the ports with the operating modes you specify.

**[-conn-switch-port-wwn-list <text>,...] - Switch Port WWN List**

Displays information only about the back-end FC switches that have the ports with the WWNs you specify.

**[-conn-switch-port-peer-port-wwn-list <text>,...] - Switch Port Peer Port WWN List**

Displays information only about the back-end FC switches that have the ports with the peer port WWNs you specify.

**[-conn-switch-port-peer-info-list <text>,...] - Switch Port Peer Host & Port Name List**

Displays information only about the back-end FC switches that have the ports with the peer information values you specify.

**[-conn-data-last-successful-refresh-timestamp {MM/DD/YYYY HH:MM:SS [{+|-}hh:mm]}] - Switch Connectivity Data Last Successful Refresh Timestamp**

Displays information only about the back-end FC switches that match the switch connectivity data last successful refresh timestamp you specify.

**[-conn-switch-port-peer-type-list {unknown|bridge|switch|fcp-adapter|fcvi-adapter}] - Switch Port Peer Type List**

Displays information only about the back-end FC switches that have the ports connected to the peer types

you specify.

**[-switch-port-name-list <text>,...] - Switch Port Name List**

Displays information only about the back-end FC switches that have the ports with the names you specify.

**[-switch-port-speed-list <integer>,...] - Switch Port Speed (in Gbps) List**

Displays information only about the back-end FC switches that have the ports with the speeds you specify.

**[-node-name-list <nodename>,...] - Node Name List**

Displays information only about the back-end FC switches that are connected to the nodes you specify.

**[-adapter-name-list <text>,...] - Node Adapter Name List**

Displays information only about the back-end FC switches that are connected to the adapters you specify.

**[-adapter-port-name-list <text>,...] - Node Adapter Port Name List**

Displays information only about the back-end FC switches that are connected to the adapter ports you specify.

**[-adapter-type-list {unknown|FCP-Initiator|FC-VI|FCP-Target}] - Node Adapter Type List**

Displays information only about the back-end FC switches that are connected to the types of adapters you specify.

**[-path-data-last-successful-refresh-timestamp {MM/DD/YYYY HH:MM:SS [{+|-}hh:mm]}] - Switch Path Data Last Successful Refresh Timestamp**

Displays information only about the back-end FC switches that match the node to switch path data last successful refresh timestamp you specify.

**[-name-list <text>,...] - Switch Name List**

Displays information only about the back-end FC switches that match the names you specify.

**[-domain-id-list <integer>,...] - Switch Domain ID List**

Displays information only about the back-end FC switches that match the domain ids you specify.

**[-wwn-list <text>,...] - Switch WWN List**

Displays information only about the back-end FC switches that match the switch WWNs you specify.

**[-role-list {unknown|primary|subordinate}] - Switch Role in Fabric List**

Displays information only about the back-end FC switches that match the switch roles you specify.

**[-address-list <IP Address>,...] - Switch IP Address List**

Displays information only about the back-end FC switches that match the switch IP addresses you specify.

## Examples

The following example displays information about all back-end FC switches:

```

cluster::> system switch fibre-channel show
          Symbolic                               Is
Monitor
  Switch      Name      Vendor  Model      Switch WWN      Monitored
Status
-----
Cisco_10.226.197.34
          mcc-cisco-8Gb-fab-4
          Cisco    DS-C9148-16P-K9
          2000547fee78f088 true      ok
Cisco_10.226.197.35
          mcc-cisco-8Gb-fab-3
          Cisco    DS-C9148-16P-K9
          2000547fee78f0f0 true      ok
Cisco_10.226.197.36
          mcc-cisco-8Gb-fab-2
          Cisco    DS-C9148-16P-K9
          2000547fee78efb0 true      ok
Cisco_10.226.197.37
          mcc-cisco-8Gb-fab-1
          Cisco    DS-C9148-16P-K9
          2000547fee78f0d8 true      ok

4 entries were displayed.
cluster::>

```

The following example displays connectivity (switch to peer and node to switch) information about all back-end FC switches:

```

cluster::> system switch fibre-channel show -connectivity
Switch Name: Cisco_10.226.197.36
Switch WWN: 2000547fee78efb0
Fabric WWN: 2001547fee78efb1
Vendor: Cisco
Model: DS-C9148-16P-K9
Errors: -
Last Update Time: 7/31/2014 14:16:42 -04:00
Connectivity:
Port Name Port Mode Port WWN      Peer Port WWN      Peer Type      Peer
Info
-----
fc1/1      F-port  2001547fee78efb0 2100001086607d34 unknown
unknown
fc1/3      F-port  2003547fee78efb0 21000024ff3dd9cb unknown

```

```

unknown
    fc1/4      F-port      2004547fee78efb0 21000024ff3dda8d unknown
unknown
    fc1/5      F-port      2005547fee78efb0 500a0980009af880 unknown
unknown
    fc1/6      F-port      2006547fee78efb0 500a0981009af370 unknown
unknown
    fc1/11     TE-port     200b547fee78efb0 200b547fee78f088 switch
Cisco_10.226.197.34:fc1/11
    fc1/12     TE-port     200c547fee78efb0 200c547fee78f088 switch
Cisco_10.226.197.34:fc1/12
    fc1/13     F-port      200d547fee78efb0 2100001086609e22 unknown
unknown
    fc1/15     F-port      200f547fee78efb0 21000024ff3dd91b unknown
unknown
    fc1/16     F-port      2010547fee78efb0 21000024ff3dbef5 unknown
unknown
    fc1/17     F-port      2011547fee78efb0 500a0981009afda0 unknown
unknown
    fc1/18     F-port      2012547fee78efb0 500a0981009a9160 unknown
unknown
    fc1/25     F-port      2019547fee78efb0 21000010866037e8 bridge
ATTO_10.226.197.17:1
    fc1/27     F-port      201b547fee78efb0 21000024ff3dd9d3 fcvi-adapter
dpg-mcc-3240-15-a1:fcvi_device_1
    fc1/28     F-port      201c547fee78efb0 21000024ff3dbe3d fcvi-adapter
dpg-mcc-3240-15-a2:fcvi_device_1
    fc1/29     F-port      201d547fee78efb0 500a0980009ae0a0 fcp-adapter
dpg-mcc-3240-15-a2:0c
    fc1/30     F-port      201e547fee78efb0 500a0981009aef40 fcp-adapter
dpg-mcc-3240-15-a1:0d
Last Update Time: 7/31/2014 14:26:48 -04:00
Path:

```

Node	Adapter	Switch Port	Speed	Adapter Type
dpg-mcc-3240-15-a1	0d	fc1/30	4Gbps	FCP-Initiator
dpg-mcc-3240-15-a1	fcvi_device_1	fc1/27	8Gbps	FC-VI
dpg-mcc-3240-15-a2	0c	fc1/29	4Gbps	FCP-Initiator
dpg-mcc-3240-15-a2	fcvi_device_1	fc1/28	8Gbps	FC-VI

The following command displays cooling (temperature sensors and fans) information about all back-end FC switches:

```

cluster::> system switch fibre-channel show -cooling
Switch Name: Cisco_10.226.197.34
      Switch WWN: 2000547fee78f088
      Fabric WWN: 2001547fee78efb1
      Vendor: Cisco
      Model: DS-C9148-16P-K9
      Errors: -
      Last Update Time: 7/31/2014 14:26:58 -04:00
Fans:
  Fan              RPM Status
  -----
Fan Module-1      - operational
Fan Module-2      operational
Fan Module-3      operational
Fan Module-4      operational
Last Update Time: 7/31/2014 14:27:10 -04:00
Temperature Sensors:
Sensor            Temp (C) Status
-----
module-1 Outlet   27 normal
module-1 Outlet   29 normal
module-1 Intake   26 normal
module-1 Intake   28 normal

```

The following command displays the error information about all back-end FC switches:

```
cluster::> system switch fibre-channel show -error
```

```
Switch Name: Cisco_10.226.197.34
```

```
Switch WWN: 2000547fee78f088
```

```
-----  
-----  
Cisco_10.226.197.34(2000547fee78f088): Switch is Unreachable over  
Management Network.
```

```
Switch Name: Cisco_10.226.197.35
```

```
Switch WWN: 2000547fee78f0f0
```

```
-----  
-----  
Cisco_10.226.197.35(2000547fee78f0f0): Switch is Unreachable over  
Management Network.
```

```
Switch Name: Cisco_10.226.197.36
```

```
Switch WWN: 2000547fee78efb0
```

```
-----  
-----  
Cisco_10.226.197.36(2000547fee78efb0): Switch is Unreachable over  
Management Network.
```

```
Switch Name: Cisco_10.226.197.37
```

```
Switch WWN: 2000547fee78f0d8
```

```
-----  
-----  
Cisco_10.226.197.37(2000547fee78f0d8): Switch is Unreachable over  
Management Network.
```

```
4 entries were displayed.
```

The following command displays the detailed information about all the back-end FC switches:

```

cluster::> system switch fibre-channel show -instance
Switch Name: Cisco_10.226.197.34
  Switch Domain: -
  Switch Role: -
  Switch WWN: 2000547fee78f088
  Fabric WWN: 2001547fee78efb1
  Vendor: Cisco
  Model: DS-C9148-16P-K9
  Firmware Version: 6.2(1)
  Management IP: 10.226.197.34
  Errors: Cisco_10.226.197.34(2000547fee78f088): Switch is
Unreachable over Management Network.
  Last Update Time: 7/31/2014 14:41:28 -04:00
Fabric:
Switch Name                Domain WWN                Role                IP Address
-----
Cisco_10.226.197.34        0 2000547fee78f088  unknown
10.226.197.34
Cisco_10.226.197.36        0 2000547fee78efb0  unknown
10.226.197.36

```

The following command displays port information about all back-end FC switches:

```

cluster::> system switch fibre-channel show -port
Switch Name: Cisco_10.226.197.34
  Switch WWN: 2000547fee78f088
  Fabric WWN: 2001547fee78efb1
  Vendor: Cisco
  Model: DS-C9148-16P-K9
  Errors: -
  Last Update Time: 7/31/2014 14:26:58 -04:00
Ports:
          Admin      Oper          SFP      Speed      BB
  Port Name Port WWN Status      Status  Port Mode Present (Gbps) Credit
PeerPortWWN
-----
fc1/1      2001547fee78f088
          enabled  online  F-port   true      8      1
2100001086608b76
fc1/2      2002547fee78f088
          enabled  offline auto    true      0      1
fc1/3      2003547fee78f088
          enabled  online  F-port   true      8      1

```

```

21000024ff48edd9
  fc1/4      2004547fee78f088
                enabled online F-port true      8      1
21000024ff3dd981
  fc1/5      2005547fee78f088
                enabled online F-port true      4      1
500a098001057f98
  fc1/6      2006547fee78f088
                enabled online F-port true      4      1
500a098101069778
  fc1/7      2007547fee78f088
                enabled offline auto true      0      1
  fc1/8      2008547fee78f088
                enabled offline auto true      0      1
  fc1/9      2009547fee78f088
                enabled offline auto true      0      1
  fc1/10     200a547fee78f088
                enabled offline auto true      0     32
  fc1/11     200b547fee78f088
                enabled offline TE-port true     8     32
200b547fee78efb0
  fc1/12     200c547fee78f088
                enabled offline TE-port true     8     32
200c547fee78efb0
  fc1/13     200d547fee78f088
                enabled online F-port true      8     32
2100001086609c2e
  fc1/14     200e547fee78f088
                enabled offline auto true      0     32
  fc1/15     200f547fee78f088
                enabled offline auto true      0     32
  fc1/16     2010547fee78f088
                enabled offline auto true      0     32
  fc1/17     2011547fee78f088
                enabled offline auto true      0     32
  fc1/18     2012547fee78f088
                enabled offline auto true      0     32
  fc1/19     2013547fee78f088
                enabled offline auto true      0     32
  fc1/20     2014547fee78f088
                enabled offline auto true      0      1
  fc1/21     2015547fee78f088
                enabled offline auto true      0      1
  fc1/22     2016547fee78f088
                enabled offline auto true      0     32
  fc1/23     2017547fee78f088

```



		enabled	offline	auto	true	0	32
fc1/24	2018547fee78f088						
		enabled	offline	auto	true	0	32
fc1/25	2019547fee78f088						
		enabled	online	F-port	true	8	32
2100001086609c06							
fc1/26	201a547fee78f088						
		enabled	offline	auto	true	0	32
fc1/27	201b547fee78f088						
		enabled	online	F-port	true	8	32
21000024ff48ea93							
fc1/28	201c547fee78f088						
		enabled	online	F-port	true	8	32
21000024ff48eacf							
fc1/29	201d547fee78f088						
		enabled	online	F-port	true	4	32
500a098101484340							
fc1/30	201e547fee78f088						
		enabled	online	F-port	true	4	32
500a09810147e700							
fc1/31	201f547fee78f088						
		enabled	offline	auto	true	0	32
fc1/32	2020547fee78f088						
		enabled	offline	auto	true	0	1
fc1/33	2021547fee78f088						
		enabled	offline	auto	true	0	1
fc1/34	2022547fee78f088						
		enabled	offline	auto	true	0	32
fc1/35	2023547fee78f088						
		enabled	offline	auto	true	0	32
fc1/36	2024547fee78f088						
		enabled	offline	auto	true	0	32
fc1/37	2025547fee78f088						
		enabled	offline	auto	true	0	32
fc1/38	2026547fee78f088						
		enabled	offline	auto	true	0	32
fc1/39	2027547fee78f088						
		enabled	offline	auto	true	0	32
fc1/40	2028547fee78f088						
		enabled	offline	auto	true	0	32
fc1/41	2029547fee78f088						
		enabled	offline	auto	true	0	32
fc1/42	202a547fee78f088						
		enabled	offline	auto	true	0	32
fc1/43	202b547fee78f088						
		enabled	offline	auto	true	0	32

```

fc1/44      202c547fee78f088
             enabled  offline auto    true           0           32
fc1/45      202d547fee78f088
             enabled  offline auto    true           0           32
fc1/46      202e547fee78f088
             enabled  offline auto    true           0           32
fc1/47      202f547fee78f088
             enabled  offline auto    true           0           32
fc1/48      2030547fee78f088
             enabled  offline auto    true           0           0
port-channel 1
             2401547fee78f088
             enabled  offline auto    true           0           0
port-channel 2
             2402547fee78f088
             enabled  offline auto    true           0           0
port-channel 3
             2403547fee78f088
             enabled  offline auto    true           0           0
port-channel 4
             2404547fee78f088
             enabled  offline auto    true           0           0
port-channel 5
             2405547fee78f088
             enabled  offline auto    true           0           0
port-channel 6
             2406547fee78f088
             enabled  offline auto    true           0           0
port-channel 7
             2407547fee78f088
             enabled  offline auto    true           0           0
port-channel 8
             2408547fee78f088
             enabled  offline auto    true           0           0
port-channel 9
             2409547fee78f088
             enabled  offline auto    true           0           0
port-channel 10
             240a547fee78f088
             enabled  offline auto    true           0           0
port-channel 11
             240b547fee78f088
             enabled  offline auto    true           0           0
port-channel 12
             240c547fee78f088
             enabled  offline auto    true           0           0

```

```
sup-fc0          enabled  online  unknown  true      1      0
```

The following command displays power supply unit information about all back-end FC switches:

```
cluster::> system switch fibre-channel show -power
Switch Name: Cisco_10.226.197.34
      Switch WWN: 2000547fee78f088
      Fabric WWN: 2001547fee78efb1
      Vendor: Cisco
      Model: DS-C9148-16P-K9
      Errors: -
      Last Update Time: 7/31/2014 14:41:49 -04:00
Power Supplies:
Power Supply      Serial Number Status
-----
300.00W 110v AC PAC15494TBZ  normal
300.00W 110v AC PAC15494T4D  normal
```

The following command displays san configuration (VSANs and Zones) information about all back-end FC switches:

```
cluster::> system switch fibre-channel show -san-config
Switch Name: Cisco_10.226.197.34
      Switch WWN: 2000547fee78f088
      Fabric WWN: 2001547fee78efb1
      Vendor: Cisco
      Model: DS-C9148-16P-K9
      Errors: -
      Last Update Time: 7/31/2014 14:41:49 -04:00
VSAN Configuration:
Oper
VSAN ID Vsan Name                Status Load Balancing  isIOD
-----
      1 VSAN0001                up      src-id-dest-id  true
      2 dpg_13_storage          up      src-id-dest-id-ox-id
                                     true
      3 dpg_13_fcvi          down    src-id-dest-id-ox-id
                                     true
     10 dpg_mcc_13_fab1_fcvi    up      src-id-dest-id  true
     20 dpg_mcc_13_fab1_storage up      src-id-dest-id-ox-id
                                     true
     30 dpg_mcc_13_fab2_fcvi  up      src-id-dest-id  true
     40 VSAN0040              up      src-id-dest-id  true
     70 dpg_mcc_14_fcvi      up      src-id-dest-id  true
     80 dpg_mcc_14_storage    up      src-id-dest-id-ox-id
```

```

true
110 dpg_mcc_15_fcvi      up      src-id-dest-id-ox-id
true
120 dpg_mcc_15_storage  up      src-id-dest-id-ox-id
true
4094 isolated_vsan      down    src-id-dest-id-ox-id
true

```

VSAN Membership:

```

VSAN ID Switch Name          Switch Port Name
-----
1 Cisco_10.226.197.34 fc1/2
1 Cisco_10.226.197.34 fc1/7
1 Cisco_10.226.197.34 fc1/8
1 Cisco_10.226.197.34 fc1/9
1 Cisco_10.226.197.34 fc1/10
1 Cisco_10.226.197.34 fc1/11
1 Cisco_10.226.197.34 fc1/12
1 Cisco_10.226.197.34 fc1/14
1 Cisco_10.226.197.34 fc1/19
1 Cisco_10.226.197.34 fc1/20
1 Cisco_10.226.197.34 fc1/21
1 Cisco_10.226.197.34 fc1/22
1 Cisco_10.226.197.34 fc1/23
1 Cisco_10.226.197.34 fc1/24
1 Cisco_10.226.197.34 fc1/31
1 Cisco_10.226.197.34 fc1/32
1 Cisco_10.226.197.34 fc1/33
1 Cisco_10.226.197.34 fc1/34
1 Cisco_10.226.197.34 fc1/35
1 Cisco_10.226.197.34 fc1/36
1 Cisco_10.226.197.34 fc1/37
1 Cisco_10.226.197.34 fc1/38
1 Cisco_10.226.197.34 fc1/39
1 Cisco_10.226.197.34 fc1/40
1 Cisco_10.226.197.34 fc1/41
1 Cisco_10.226.197.34 fc1/42
1 Cisco_10.226.197.34 fc1/43
1 Cisco_10.226.197.34 fc1/44
1 Cisco_10.226.197.34 fc1/45
1 Cisco_10.226.197.34 fc1/46
1 Cisco_10.226.197.34 fc1/47
1 Cisco_10.226.197.34 fc1/48
1 Cisco_10.226.197.34 port-channel 1
1 Cisco_10.226.197.34 port-channel 2
1 Cisco_10.226.197.34 port-channel 3
1 Cisco_10.226.197.34 port-channel 4

```

```
1 Cisco_10.226.197.34 port-channel 5
1 Cisco_10.226.197.34 port-channel 6
1 Cisco_10.226.197.34 port-channel 7
1 Cisco_10.226.197.34 port-channel 8
1 Cisco_10.226.197.34 port-channel 9
1 Cisco_10.226.197.34 port-channel 10
1 Cisco_10.226.197.34 port-channel 11
1 Cisco_10.226.197.34 port-channel 12
1 Cisco_10.226.197.36 fc1/2
1 Cisco_10.226.197.36 fc1/7
1 Cisco_10.226.197.36 fc1/8
1 Cisco_10.226.197.36 fc1/9
1 Cisco_10.226.197.36 fc1/10
1 Cisco_10.226.197.36 fc1/11
1 Cisco_10.226.197.36 fc1/12
1 Cisco_10.226.197.36 fc1/14
1 Cisco_10.226.197.36 fc1/19
1 Cisco_10.226.197.36 fc1/20
1 Cisco_10.226.197.36 fc1/21
1 Cisco_10.226.197.36 fc1/22
1 Cisco_10.226.197.36 fc1/23
1 Cisco_10.226.197.36 fc1/24
1 Cisco_10.226.197.36 fc1/26
1 Cisco_10.226.197.36 fc1/31
1 Cisco_10.226.197.36 fc1/32
1 Cisco_10.226.197.36 fc1/33
1 Cisco_10.226.197.36 fc1/34
1 Cisco_10.226.197.36 fc1/35
1 Cisco_10.226.197.36 fc1/36
1 Cisco_10.226.197.36 fc1/37
1 Cisco_10.226.197.36 fc1/38
1 Cisco_10.226.197.36 fc1/39
1 Cisco_10.226.197.36 fc1/40
1 Cisco_10.226.197.36 fc1/41
1 Cisco_10.226.197.36 fc1/42
1 Cisco_10.226.197.36 fc1/43
1 Cisco_10.226.197.36 fc1/44
1 Cisco_10.226.197.36 fc1/45
1 Cisco_10.226.197.36 fc1/46
1 Cisco_10.226.197.36 fc1/47
1 Cisco_10.226.197.36 fc1/48
30 Cisco_10.226.197.34 fc1/3
30 Cisco_10.226.197.34 fc1/4
30 Cisco_10.226.197.36 fc1/3
30 Cisco_10.226.197.36 fc1/4
40 Cisco_10.226.197.34 fc1/1
```

```

40 Cisco_10.226.197.34 fc1/5
40 Cisco_10.226.197.34 fc1/6
40 Cisco_10.226.197.36 fc1/1
40 Cisco_10.226.197.36 fc1/5
40 Cisco_10.226.197.36 fc1/6
70 Cisco_10.226.197.34 fc1/15
70 Cisco_10.226.197.34 fc1/16
70 Cisco_10.226.197.36 fc1/15
70 Cisco_10.226.197.36 fc1/16
80 Cisco_10.226.197.34 fc1/13
80 Cisco_10.226.197.34 fc1/17
80 Cisco_10.226.197.34 fc1/18
80 Cisco_10.226.197.36 fc1/13
80 Cisco_10.226.197.36 fc1/17
80 Cisco_10.226.197.36 fc1/18
110 Cisco_10.226.197.34 fc1/26
110 Cisco_10.226.197.34 fc1/27
110 Cisco_10.226.197.34 fc1/28
120 Cisco_10.226.197.34 fc1/25
120 Cisco_10.226.197.34 fc1/29
120 Cisco_10.226.197.34 fc1/30
120 Cisco_10.226.197.36 fc1/25
120 Cisco_10.226.197.36 fc1/29
120 Cisco_10.226.197.36 fc1/30

```

Last Update Time: 7/31/2014 14:45:40 -04:00

Zone Configuration:

Member	Member	Member				
Zone Name	VSAN ID	Switch Name	Port Name	Port ID	Member	WWN
dpg_mcc_fcvi	30	Cisco_10.226.197.36	fc1/3	-		
\$default_zone\$	30	Cisco_10.226.197.36	fc1/4			
dpg_mcc_storage	40	Cisco_10.226.197.36	fc1/1			
\$default_zone\$	40	Cisco_10.226.197.36	fc1/5			
dpg_mcc_14_fcvi	70	Cisco_10.226.197.36	fc1/15			
\$default_zone\$	70	Cisco_10.226.197.36	fc1/16			
dpg_mcc_14_storage	80	Cisco_10.226.197.34	fc1/13			

```

$default_zone$ 80 Cisco_10.226.197.34
                  fc1/17

dpg_mcc_15_fcvi
                  110 Cisco_10.226.197.36
                  fc1/27

$default_zone$
                  110 Cisco_10.226.197.36
                  fc1/28

dpg_mcc_15_storage
                  120 Cisco_10.226.197.34
                  fc1/25

$default_zone$
                  120 Cisco_10.226.197.34
                  fc1/29

```

The following command displays port SFP information about all back-end FC switches:

```

cluster::> system switch fibre-channel show -sfp
Switch Name: Cisco_10.226.197.34
          Switch WWN: 2000547fee78f088
          Fabric WWN: 2001547fee78efb1
          Vendor: Cisco
          Model: DS-C9148-16P-K9
          Errors: -
          Last Update Time: 7/31/2014 14:41:49 -04:00
SFP:
Port Name Type          Tx Type          Vendor          Part Number Serial
Number
-----
fc1/1      sfp-with-serial-id
          short-wave-laser CISCO-FINISAR
          FTLF8528P2BCV-CS
FNS160629J9
fc1/2      unknown          unknown
fc1/3      sfp-with-serial-id
          short-wave-laser CISCO-FINISAR
          FTLF8528P2BCV-CS
FNS160629H3
fc1/4      sfp-with-serial-id
          short-wave-laser CISCO-FINISAR
          FTLF8528P2BCV-CS

```

```

FNS160629QH
  fc1/5      sfp-with-serial-id
              short-wave-laser CISCO-FINISAR
                                      FTLF8528P2BCV-CS

FNS160628EA
  fc1/6      sfp-with-serial-id
              short-wave-laser CISCO-FINISAR
                                      FTLF8528P2BCV-CS

FNS160629QT
  fc1/7      unknown      unknown
  fc1/8      unknown      unknown
  fc1/9      unknown      unknown
  fc1/10     unknown      unknown
  fc1/11     sfp-with-serial-id
              short-wave-laser CISCO-FINISAR
                                      FTLF8528P2BCV-CS

FNS160629GP
  fc1/12     sfp-with-serial-id
              short-wave-laser CISCO-FINISAR
                                      FTLF8528P2BCV-CS

FNS16061X71
  fc1/13     sfp-with-serial-id
              short-wave-laser CISCO-FINISAR
                                      FTLF8528P2BCV-CS

FNS160629P8
  fc1/14     unknown      unknown
  fc1/15     sfp-with-serial-id
              short-wave-laser CISCO-FINISAR
                                      FTLF8528P2BCV-CS

FNS160629JP
  fc1/16     sfp-with-serial-id
              short-wave-laser CISCO-FINISAR
                                      FTLF8528P2BCV-CS

FNS160628D2
  fc1/17     sfp-with-serial-id
              short-wave-laser CISCO-FINISAR
                                      FTLF8528P2BCV-CS

FNS160629NG

```



fc1/18	sfp-with-serial-id		
		short-wave-laser	CISCO-FINISAR
			FTLF8528P2BCV-CS
FNS160629R1			
fc1/19	unknown	unknown	
fc1/20	unknown	unknown	
fc1/21	unknown	unknown	
fc1/22	unknown	unknown	
fc1/23	sfp-with-serial-id		
		short-wave-laser	CISCO-FINISAR
			FTLF8528P2BCV-CS
FNS160629NC			
fc1/24	sfp-with-serial-id		
		short-wave-laser	CISCO-FINISAR
			FTLF8528P2BCV-CS
FNS160628CX			
fc1/25	sfp-with-serial-id		
		short-wave-laser	CISCO-FINISAR
			FTLF8528P2BCV-CS
FNS160629NZ			
fc1/26	unknown	unknown	
fc1/27	sfp-with-serial-id		
		short-wave-laser	CISCO-FINISAR
			FTLF8528P2BCV-CS
FNS16061XB0			
fc1/28	sfp-with-serial-id		
		short-wave-laser	CISCO-FINISAR
			FTLF8528P2BCV-CS
FNS16061XA6			
fc1/29	sfp-with-serial-id		
		short-wave-laser	CISCO-FINISAR
			FTLF8528P2BCV-CS
FNS16061XA0			
fc1/30	sfp-with-serial-id		
		short-wave-laser	CISCO-FINISAR
			FTLF8528P2BCV-CS
FNS16061X9S			
fc1/31	unknown	unknown	

fc1/32	unknown	unknown	
fc1/33	sfp-with-serial-id		
		short-wave-laser	CISCO-FINISAR
			FTLF8528P2BCV-CS
FNS16061NL7			
fc1/34	unknown	unknown	
fc1/35	sfp-with-serial-id		
		short-wave-laser	CISCO-FINISAR
			FTLF8528P2BCV-CS
FNS160629M8			
fc1/36	sfp-with-serial-id		
		short-wave-laser	CISCO-FINISAR
			FTLF8528P2BCV-CS
FNS160629KH			
fc1/37	unknown	unknown	
fc1/38	unknown	unknown	
fc1/39	unknown	unknown	
fc1/40	unknown	unknown	
fc1/41	unknown	unknown	
fc1/42	unknown	unknown	
fc1/43	unknown	unknown	
fc1/44	unknown	unknown	
fc1/45	unknown	unknown	
fc1/46	unknown	unknown	
fc1/47	unknown	unknown	
fc1/48	unknown	unknown	
port-channel 1			
	unknown	unknown	
port-channel 2			
	unknown	unknown	
port-channel 3			
	unknown	unknown	
port-channel 4			
	unknown	unknown	
port-channel 5			
	unknown	unknown	
port-channel 6			
	unknown	unknown	
port-channel 7			
	unknown	unknown	
port-channel 8			
	unknown	unknown	
port-channel 9			

```

                unknown      unknown
port-channel 10
                unknown      unknown
port-channel 11
                unknown      unknown
port-channel 12
                unknown      unknown
sup-fc0

```

The following command displays port statistics information about all back-end FC switches:

```

cluster::> system switch fibre-channel show -stats
Switch Name: Cisco_10.226.197.34
          Switch WWN: 2000547fee78f088
          Fabric WWN: 2001547fee78efb1
          Vendor: Cisco
          Model: DS-C9148-16P-K9
          Errors: -
          Last Update Time: 7/31/2014 14:41:49 -04:00
Port Statistics:

```

Error	Port Name	Rx Frames	Rx Octets	Tx Frames	Tx Octets
0	fc1/1	2116207233	3710682580	3906335374	859905888
0	fc1/2	1	208	1	208
0	fc1/3	3238899002	903116292	3079548736	4014304952
0	fc1/4	1888758418	1643379900	2434821325	2997002344
0	fc1/5	3719731908	1808138824	1878240211	3421335100
0	fc1/6	26444430347	1042009564	249190625	2003353056
0	fc1/7	1	228	1	228
0	fc1/8	1	156	1	156
0	fc1/9	1	148	1	148
0	fc1/10	1	224	1	224

0					
	fc1/11	3617142898	4129927136	39089396	2595464620
0					
	fc1/12	473603889	1560909460	2797562521	2833496016
0					
	fc1/13	1852255936	1091902804	180309704	1769859928
0					
	fc1/14	1	140	1	140
0					
	fc1/15	4997082	3519688264	4283938	3370856432
0					
	fc1/16	4995287	3519577592	4282173	3370732136
0					
	fc1/17	55146756	178045212	1733567096	3030415436
0					
	fc1/18	63005788	4287094736	1726651844	2640371212
0					
	fc1/19	1	200	1	200
0					
	fc1/20	1	104	1	104
0					
	fc1/21	1	108	1	108
0					
	fc1/22	1	108	1	108
0					
	fc1/23	1	164	1	164
0					
	fc1/24	1	216	1	216
0					
	fc1/25	2810698819	1611009260	471527156	1900246656
0					
	fc1/26	1	104	1	104
0					
	fc1/27	4165019838	887421780	3848122102	2581891136
0					
	fc1/28	58607737	1015197080	101621078	3482734024
0					
	fc1/29	4266270960	222242144	3766674764	2400640552
0					
	fc1/30	3984658378	1443835508	152597387	678837848
0					
	fc1/31	1	220	1	220
0					
	fc1/32	1	120	1	120
0					
	fc1/33	1	132	1	132

0	fc1/34	1	144	1	144
0	fc1/35	1	160	1	160
0	fc1/36	1	104	1	104
0	fc1/37	1	148	1	148
0	fc1/38	1	184	1	184
0	fc1/39	1	160	1	160
0	fc1/40	1	136	1	136
0	fc1/41	1	196	1	196
0	fc1/42	1	128	1	128
0	fc1/43	1	168	1	168
0	fc1/44	1	212	1	212
0	fc1/45	1	136	1	136
0	fc1/46	1	224	1	224
0	fc1/47	1	104	1	104
0	fc1/48	1	104	1	104

## Related Links

- [system switch fibre-channel add](#)

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