system switch commands

Command reference

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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 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 or storage. This command might be needed when ONTAP is unable to automatically discover and initiate monitoring of a switch through the Cisco Discovery Protocol (CDP) or the Link Layer Discovery Protocol (LLDP). If ONTAP has discovered a switch that is not in system switch ethernet show , such as if the switch was deleted using system switch ethernet delete with the `force`

parameter, the `device` , `address` , and `type` parameters must match the discovered values. To identify which switches are currently monitored, use the system switch ethernet show command. If this switch was previously monitored 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 `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.

`-model {OTHER|NX3132V|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|storage-network}` - Switch Network

Switch type: `cluster-network` or `storage-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 cshm1! -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
-snmp-version SNMPv3 -community-or-username snmpv3u1 -model OTHER -type
storage-network
```

Related Links

- system switch ethernet show
- system switch ethernet delete

system switch ethernet delete

Delete information about an Ethernet switch (cluster 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 delete an Ethernet switch. This command is intended to be used to delete a switch that has been disconnected from the system, instead of waiting for it to be deleted automatically. If you want to stop monitoring the switch, use system switch ethernet modify to set the *`is-monitoring-enabled-admin`* parameter to *`false`* . By default, this command only allows deletion of a switch if the *`is-discovered`* parameter is *`false`* (ONTAP isn't receiving Cisco Discovery Protocol (CDP) or Link Layer Discovery Protocol (LLDP) data for the switch). However, if the `force` parameter is used, the switch will be deleted regardless of *`is-discovered`* . If the switch is rediscovered, it will be re-added automatically.

Parameters

`-device <text>` - Device Name

Name of the Ethernet switch that you want to delete.

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

This parameter forces the delete operation. This allows deletion of a switch when *`is-discovered`* is *`true`* . Note: The switch may be re-added automatically.

Examples

Example 1: Delete a removed switch named SwitchA.

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

Example 2: Forcefully remove a discovered switch named SwitchB.

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

Related Links

- system switch ethernet modify

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 SNMP version, SNMPv2c community or SNMPv3 username, and monitoring status. If *`is-discovered`* is *`false`* , the IP address and type can also be changed.

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|storage-network}]` - Switch Network

Switch type: `cluster-network` or `storage-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, unnecessary alerts may be generated if monitoring is left enabled. 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

(DEPRECATED)-Displays the list of switches

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

Description

This command has been deprecated. It may be removed from a future release of ONTAP.

The `system switch ethernet show-all` command displays configuration details for cluster and storage Ethernet switches.

Parameters

`[-fields <fieldname>,…]`
Selects the fields that have the specified name.

| `[-instance ]` (privilege: advanced) }
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|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, SNMP, CDP, ISDP, or LLDP).

[-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.

[-role <text>] - Configured Role (privilege: advanced)

Selects the switches that match the specified role or combined role (different roles can be combined using '+').

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 and storage).

system switch ethernet show

Display the configuration for Ethernet switches (cluster 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 cluster and storage Ethernet switches.

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 {OTHER|NX3132V|NX3232C}] - Model Number

Selects the switches that match the specified model number.

[-type {cluster-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, SNMP, CDP, ISDP, or LLDP).

[-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.

[-rcf-version <text>] - Reference Config File Version

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

[-role <text>] - Configured Role

Selects the switches that match the specified role or combined role (different roles can be combined using '+'):

- cluster
- multicluster
- storage
- multistorage
- metrocluster

Examples

```
cluster1::> system switch ethernet show
  Switch                    Type               Address          Model
  ------------------------- ------------------ ---------------
---------------
  SwitchA                   cluster-network    1.2.3.4          N9K-
C9336C-FX2
     Serial Number: FFF123456V1
      Is Monitored: true
            Reason: None
  Software Version: Cisco Nexus Operating System (NX-OS) Software, Version
                    10.3(4a)
    Version Source: CDP/ISDP
SwitchB                     cluster-network    2.3.4.5          N9K-
C9336C-FX2
     Serial Number: FEE234567V2
      Is Monitored: true
            Reason: None
  Software Version: Cisco Nexus Operating System (NX-OS) Software, Version
                    10.3(4a)
    Version Source: CDP/ISDP
```

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

system switch ethernet fan show

Display fan information for Ethernet switches (cluster 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
                                                          Is PSU
Fan                Type   Fan Status       Container      Fan    Error
------------------ ------ ---------------- -------------- ------
------------
Fan Module-1       tray   operational      FanBay-1       no

Fan Module-2       tray   operational      FanBay-2       no

Switch: SwitchB
                                                          Is PSU
Fan                Type   Fan Status       Container      Fan    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 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}] - Adminstrative 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).

[-timestamp <MM/DD/YYYY HH:MM:SS>] - Stats Retrieval Timestamp

Selects the interface ports with statistics collected at the specified timestamp.

[-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|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.

[-is-vpc-peer-link {yes|no}] - Is vPC Peer Link Interface

Selects the interface ports that are part of the vPC peer link (yes) or are not part of the vPC peer link (no).

[-role <text>] - Role

Selects the interface ports that are configured for the specified role.

[-breakout-physical-port <text>] - Breakout Physical Port

Selects the breakout interface ports with the specified physical interface name.

[-breakout-number <integer>] - Breakout Number

Selects the breakout interface ports with the specified sub-interface number.

Examples

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

Switch: SwitchA
Opera-
           Num-                      Admin   tional   Is
Interface  ber  Index     Type       Status  Status   ISL  MTU   Duplex
Speed
---------- ---- --------- ---------- ------- -------- ---- ----- ------
--------
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-                      Admin   tional   Is
Interface  ber  Index     Type       Status  Status   ISL  MTU   Duplex
Speed
---------- ---- --------- ---------- ------- -------- ---- ----- ------
--------
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-support-log

Initiates the support log collection for the specified Ethernet switch.

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

Description

The `system switch ethernet log collect-support-log` command initiates the support log collection for the specified Ethernet switch via SSH.

Log files are removed during takeover or giveback operations.

Parameters

-device <text> - Switch Name

Ethernet switch device for which the support log collection will be performed.

> 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.

Examples

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

Initiates support log collection for the specified Ethernet switches.

Related Links

- system switch ethernet show

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 the enablement and status of the hourly collection of periodic data and the status of the collection of detailed support logs.

Parameters

-device <text> - Switch Name

Ethernet switch device for which the log request is being made.

> 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.

[-support-requested {true|false}] - Support Log Requested

Request (true) or cancel (false) support log collection.

[-periodic-enabled {true|false}] - Periodic Log Enabled

Enable (true) or disable (false) periodic log collection.

Examples

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

Enables periodic log collection for the specified Ethernet 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 enablement and status of the hourly collection of periodic data and the status of the collection of detailed support 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] }

If this parameter is specified, the command displays information about all entries.

[-device <text>] - Switch Name

If this parameter is specified, the command only displays log collection details of the provided Ethernet switch(es).

[-support-requested {true|false}] - Support Log Requested

If this parameter is specified, the command only displays log collection details of the Ethernet switch(es) with support log collection requested (*true*) or not requested (*false*).

[-support-timestamp <MM/DD/YYYY HH:MM:SS>] - Last Support Log Timestamp

If this parameter is specified, the command only displays log collection details of the Ethernet switch(es) with the provided timestamp for periodic log collection.

[-support-filename <text>] - Support Log Filename

If this parameter is specified, the command only displays log collection details of the Ethernet switch(es) with the provided path for support log collection.

[-periodic-enabled {true|false}] - Periodic Log Enabled

If this parameter is specified, the command only displays log collection details of the Ethernet switch(es) with periodic log collection enabled (*true*) or disable (*false*).

[-support-state {never-run|initiated|in-progress|completed|failed}] - Support Log State

If this parameter is specified, the command only displays log collection details of the Ethernet switch(es) with the provided state; *never-run* , *initiated* , *in-progress* , *completed* , or *failed*

[-support-status-msg <text>] - Support Log Status

If this parameter is specified, the command only displays log collection details of the Ethernet switch(es) with the provided status message for support log collection.

[-periodic-state {never-run|scheduled|in-progress|halted|failed}] - Periodic Log State

If this parameter is specified, the command only displays log collection details of the Ethernet switch(es) with the provided state; either *never-run* , *scheduled* , *in-progress* , *halted* , or *failed* .

[-periodic-status-msg <text>] - Periodic Log Status

If this parameter is specified, the command only displays log collection details of the Ethernet switch(es) with the provided status message for periodic log collection.

[-periodic-timestamp <MM/DD/YYYY HH:MM:SS>] - Last Periodic Log Timestamp

If this parameter is specified, the command only displays log collection details of the Ethernet switch(es) with the provided timestamp for periodic log collection.

[-periodic-filename <text>] - Periodic Log Filename

If this parameter is specified, the command only displays log collection details of the Ethernet switch(es) with the provided path for periodic log collection.

Examples

```
cluster1::> system switch ethernet log show
Periodic    Periodic    Support
            Switch                                    Log Enabled Log
State   Log State
            ----------------------------------------- -----------
----------- -----------
            switch-name01(Switch---SN)                true
scheduled   failed
            switch-name02(Switch---SN)                false       failed
-
```

Displays the Ethernet switches, their periodic log collection enablement, their periodic log collection state, and their support log collection state.

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 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}] - Adminstrative Status

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

Examples

```
cluster1::> system switch ethernet power show
                                    Admin      Operational
Switch             Power Supply     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 support show

Display Ethernet switch support status.

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

Description

The `system switch ethernet support show` command displays the switch model, firmware or software version, and RCF support information.

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 this parameter is specified, the command displays information about all entries.

[-device <text>] - Switch Name

If this parameter is specified, the command only displays support details of the provided Ethernet switch.

[-support-status <text>] - Support Status

If this parameter is specified, the command displays only Ethernet switches with the provided support status.

[-recommended-action <text>] - Recommended Action

If this parameter is specified, the command displays only Ethernet switches with the provided recommended action.

Examples

```
cluster1::> system switch ethernet support show
Switch                    Support Status     Recommended Action
            ------------------------- ------------------
-----------------------------------
            switch-name01(Switch--SN) Ok                 -
            switch-name02(Switch--SN) Unsupported FW     Upgrade RCF: XXX
```

Displays the Ethernet switches, their support status, and the recommended action to take.

system switch ethernet switch-count show

Display the count of cluster-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>] - (DEPRECATED)-Management Switch Count

This parameter is deprecated and may be removed in a future release of ONTAP.

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  Storage Switchless
Sw Count Sw Count Config
-------- -------- ----------
       2        2 false
```

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

system switch ethernet temperature show

Display temperature information for Ethernet switches (cluster 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
               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::>
```

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 ©
- 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
- Where 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:
                                                        Switch
                                                          Port
     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:
                           Rx           Rx           Tx           Tx
Error
    Port Name          Frames       Octets       Frames       Octets
Frames
    ------------ ------------ ------------ ------------ ------------
------------
    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          2644430347   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
0
```

Related Links

- system switch fibre-channel add

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