



## **storage switch commands**

ONTAP 9.6 commands

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# storage switch commands

## storage switch add

Add a back-end switch for monitoring

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

### Description

The `storage switch add` command enables you to add 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 switch that is added for monitoring.

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

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

#### **{ [-snmp-community <text>]** - (DEPRECATED)-SNMPv2c Community or SNMPv3 Username



This parameter is deprecated and may be removed in a future release of Data ONTAP. Use `-snmp-community-or-username` instead.

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

#### **| [-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 `storage switch 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::> storage switch add -address 10.226.197.34 -snmp-community-or
             -username public
cluster1::> storage switch 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. Data ONTAP uses SNMPv3 and 'snmpuser1' username to communicate with this switch.

```

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

```

## storage switch modify

Modify information about a back-end switch's configuration

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

### Description

The `storage switch modify` enables you to modify certain parameters for identifying and accessing the FC back-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 Data 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 <text> ] - (DEPRECATED)-SNMPv2c Community or SNMPv3 Username**

This parameter is deprecated and may be removed in a future release of Data ONTAP. Use -snmp-community-or-username instead.

This parameter specifies the SNMPv2c community set or SNMPv3 username on 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::> storage switch 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::> storage switch 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::> storage switch modify -switch-name Brocade6505 -switch
-ipaddress 10.226.197.34 -snmp-version SNMPv3 -snmp-community-or-username
snmpuser1
cluster1::>
```

# storage switch refresh

Refresh storage switch info

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

## Description

The `storage switch refresh` command triggers a refresh of the SNMP data for the MetroCluster 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 [storage switch add](#) and [storage bridge add](#) commands respectively.

## Examples

The following command triggers a refresh for the SNMP data:

```
cluster1::*> storage switch refresh  
cluster1::*>
```

## Related Links

- [storage switch add](#)
- [storage bridge add](#)

# storage switch remove

Remove a back-end switch from monitoring

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

## Description

The `storage switch remove` enables you to remove FC back-end switches that were previously added for SNMP monitoring.

## Parameters

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

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

## Examples

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

```

cluster1::> storage switch 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::> storage switch remove -switch-name Cisco_10.226.197.34
cluster1::> storage switch 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::>

```

# storage switch show

Display switch information

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

## Description

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

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

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

## Parameters

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

Displays the specified fields for all the storage switches, in column style output.

| [-connectivity ]

Displays the following details about the connectivity from the storage 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 storage 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 storage 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 storage switch.

**| [-port ]**

Displays the following details about the storage 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 storage switch power supplies:

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

**| [-san-config ]**

Displays the following details about the Virutal Storage Area Networks (VSAN) and Zones of the storage 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 storage switch ports Small Formfactor 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 storage 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 storage switches in the system. If a storage switch is specified, then this parameter displays the same detailed information for the storage switch you specify as does the -switch-name parameter.

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

Displays information only about the storage switches that match the name you specify.

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

Displays information only about the storage switches that match the switch wwn you specify.

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

Displays information only about the storage switches that match the switch symbolic name you specify.

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

Displays information only about the storage switches that match the switch fabric you specify.

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

Displays information only about the storage switches that match the switch domain id you specify.

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

Displays information only about the storage switches that match the switch role you specify.

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

Displays information only about the storage switches that match the switch SNMP version you specify.

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

Displays information only about the storage switches that match the switch model you specify.

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

Displays information only about the storage switches that match the switch vendor you specify.

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

Displays information only about the storage switches that match the switch firmware version you specify.

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

Displays information only about the storage switches that match the switch serial number you specify.

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

Displays information only about the storage switches that match the switch IP address you specify.

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

Displays information only about the storage switches that match the switch status you specify.

**`[-snmp-community <text>]` - (DEPRECATED)-SNMPv2c Community or SNMPv3 Username**

This parameter is deprecated and may be removed in a future release of Data ONTAP. Use `-snmp-community-or-username` instead.

Displays information only about the storage switches that match the switch SNMPv2c community or SNMPv3 username you specify.

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

Displays information only about the storage 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 storage 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 storage switches that match the switch monitoring value you specify.

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

Displays information only about the storage switches that match the blade value you specify.

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

Displays information only about the storage switches that match the SNMPv3 engine-id you specify.

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

Displays information only about the storage 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 storage 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 storage 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 storage 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 storage 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 storage 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 storage 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 storage 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 storage switches that match the fans with the names you specify.

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

Displays information only about the storage 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 storage 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 storage 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 storage switches that have the VSANs with the indexes you specify.

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

Displays information only about the storage 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 storage 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 storage switches that have the VSANs with the load balancing types you specify.

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

Displays information only about the storage 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 storage 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 storage 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 storage 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 storage switches that have the VSANs with the IDs you specify.

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

Displays information only about the storage 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 storage 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 storage 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 storage 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 storage 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 storage 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 storage 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 storage 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 storage switches that have the ports with the WWNs you specify.

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

Displays information only about the storage 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 storage 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 storage 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}]` - Switch Port Mode List**

Displays information only about the storage 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 storage 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 storage 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 storage 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 storage 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 storage 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 storage 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 storage 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 storage 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 storage 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 storage 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 storage 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 storage 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 storage 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 storage 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-1x4|ten-gig-base-sw|ten-gig-base-lw|ten-gig-base-ew}] - Switch Port SFP Transmitter Type List`**

Displays information only about the storage 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 storage 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 storage 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 storage 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 storage 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 storage switches that have the errors you specify.

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

Displays information only about the storage 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}] - Switch Port Operating Mode List**

Displays information only about the storage 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 storage 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 storage 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 storage 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 storage 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 storage 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 storage 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 storage switches that have the ports with the speeds you specify.

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

Displays information only about the storage switches that are connected to the nodes you specify.

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

Displays information only about the storage switches that are connected to the adapters you specify.

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

Displays information only about the storage 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 storage 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 storage 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 storage switches that match the names you specify.

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

Displays information only about the storage switches that match the domain ids you specify.

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

Displays information only about the storage switches that match the switch WWNs you specify.

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

Displays information only about the storage switches that match the switch roles you specify.

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

Displays information only about the storage switches that match the switch IP addresses you specify.

## Examples

The following example displays information about all storage switches:

```

cluster::>storage switch 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 storage switches:

```

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

```

```

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

```

Path:

Node	Adapter	Switch Port			Speed	Adapter	Type
		Switch	Port				
<hr/>							
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 storage switches:

```
cluster::>storage switch 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 storage switches:

```
cluster::> storage switch 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 storage switches:

```

cluster::> storage switch 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 storage switches:

```

cluster::> storage switch 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 storage switches:

```
cluster::> storage switch 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 storage switches:

```
cluster::> storage switch 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
```

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
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 storage switches:

```

cluster::> storage switch 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 storage switches:

```

cluster::> storage switch 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 Frames	Rx Octets	Tx Frames	Tx Octets
Error				
Port Name	Frames	Octets	Frames	Octets
Frames				
fc1/1	2116207233	3710682580	3906335374	859905888
fc1/2	1	208	1	208
fc1/3	3238899002	903116292	3079548736	4014304952
fc1/4	1888758418	1643379900	2434821325	2997002344
fc1/5	3719731908	1808138824	1878240211	3421335100
fc1/6	2644430347	1042009564	249190625	2003353056
fc1/7	1	228	1	228
fc1/8	1	156	1	156
fc1/9	1	148	1	148
fc1/10	1	224	1	224

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

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

## Related Links

- [storage switch add](#)

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