CHAPTER 1

Configuring Fibre Channel Interfaces

This chapter describes interface configuration for Fibre Channel interfaces and virtual Fibre Channel interfaces. This chapter includes the following sections:

Information About Fibre Channel Interfaces

This section describes Fibre Channel interfaces and virtual Fibre Channel interfaces. This section includes the following topics:

Licensing Requirements

On Cisco Nexus 5000 Series switches, Fibre Channel capability is included in the Storage Protocol Services license.

Ensure that you have the correct license installed (N5010SS or N5020SS) before using Fibre Channel interfaces and capabilities.

Note You can configure virtual Fibre Channel interfaces without a Storage Protocol Services license, but these interfaces will not become operational until the license is activated.

Physical Fibre Channel Interfaces

Cisco Nexus 5000 Series switches provide up to eight physical Fibre Channel uplinks. The Fibre Channel interfaces are supported on optional expansion modules. The Fibre Channel plus Ethernet expansion module contains four Fibre Channel interfaces.

Each Fibre Channel port can be used as a downlink (connected to a server) or as an uplink (connected to the data center SAN network). The Fibre Channel interfaces support the following modes: F, NP, E, TE, and SD.

Virtual Fibre Channel Interfaces

Fibre Channel over Ethernet (FCoE) encapsulation allows a physical Ethernet cable to simultaneously carry Fibre Channel and Ethernet traffic. In Cisco Nexus 5000 Series switches, an FCoE-capable physical Ethernet interface can carry traffic for one virtual Fibre Channel interface.

Native Fibre Channel and virtual Fibre Channel interfaces are configured using the same CLI commands. Virtual Fibre Channel interfaces support only F mode, and offer a subset of the features that are supported on native Fibre Channel interfaces.

The following capabilities are not supported for virtual Fibre Channel interfaces:

- SAN port channels.
- VSAN trunking. The virtual Fibre Channel is associated with one VSAN.
- The SPAN destination cannot be a virtual Fibre Channel interface.
- Buffer-to-buffer credits.
- Exchange link parameters (ELP), or Fabric Shortest Path First (FSPF) protocol.
- Configuration of physical attributes (speed, rate, mode, transmitter information, MTU size).
- Port tracking.

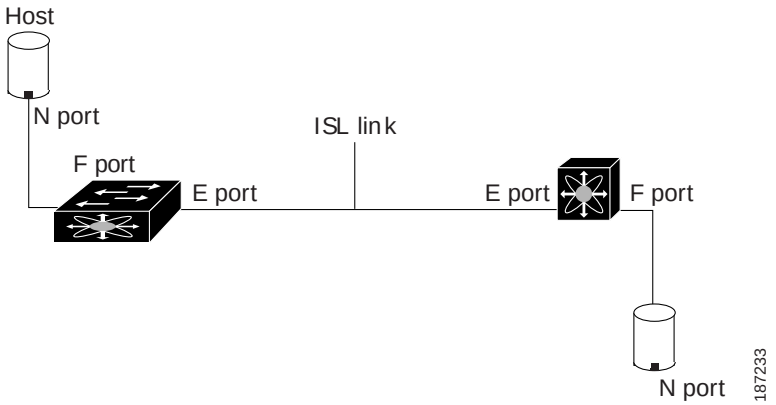
Interface Modes

Each physical Fibre Channel interface in a switch may operate in one of several port modes: E mode, TE mode, F mode, and SD mode (see Figure 1-1). A physical Fibre Channel interface can be configured as an E port, an F port, or an SD port. Interfaces may also be configured in Auto mode; the port type is determined during interface initialization.

In NPV mode, Fibre Channel interfaces may operate in NP mode, F mode or SD mode. For additional information about NPV mode, see Chapter 1, “Configuring N Port Virtualization.”

Virtual Fibre Channel interfaces can only be configured in F mode.

Figure 1-1 Switch Port Modes



Note Interfaces are automatically assigned VSAN 1 by default. See Chapter 1, "Configuring and Managing VSANs."

Each interface has an associated administrative configuration and an operational status:

- The administrative configuration does not change unless you modify it. This configuration has various attributes that you can configure in administrative mode.
- The operational status represents the current status of a specified attribute such as the interface speed. This status cannot be changed and is read-only. Some values may not be valid when the interface is down (for example, the operational speed).

The following sections provide a brief description of each interface mode:

- E Port, page 1-3
- F Port, page 1-4
- NP Port, page 1-4
- TE Port, page 1-4
- SD Port, page 1-4
- Auto Mode, page 1-4

E Port

In expansion port (E port) mode, an interface functions as a fabric expansion port. This port may be connected to another E port to create an Inter-Switch Link (ISL) between two switches. E ports carry frames between switches for configuration and fabric management. They serve as a conduit between switches for frames destined to remote N ports. E ports support class 3 and class F service.

An E port connected to another switch may also be configured to form a SAN port channel (see Chapter 1, "Configuring SAN Port Channels").

F Port

In fabric port (F port) mode, an interface functions as a fabric port. This port may be connected to a peripheral device (host or disk) operating as an N port. An F port can be attached to only one N port. F ports support class 3 service.

NP Port

When the switch is operating in NPV mode, the interfaces that connect the switch to the core network switch are configured as NP ports. NP ports operate like N ports that function as proxies for multiple physical N ports.

For more details about NP ports and NPV, see Chapter 1, “Configuring N Port Virtualization.”

TE Port

In trunking E port (TE port) mode, an interface functions as a trunking expansion port. It may be connected to another TE port to create an extended ISL (EISL) between two switches. TE ports connect to another Cisco Nexus 5000 Series switch or a Cisco MDS 9000 Family switch. They expand the functionality of E ports to support the following:

- VSAN trunking
- Fibre Channel trace (fctrace) feature

In TE port mode, all frames are transmitted in EISL frame format, which contains VSAN information. Interconnected switches use the VSAN ID to multiplex traffic from one or more VSANs across the same physical link. This feature is referred to as VSAN trunking in the Cisco Nexus 5000 Series (see Chapter 1, “Configuring VSAN Trunking”). TE ports support class 3 and class F service.

SD Port

In SPAN destination port (SD port) mode, an interface functions as a switched port analyzer (SPAN). The SPAN feature monitors network traffic that passes though a Fibre Channel interface. This monitoring is done using a standard Fibre Channel analyzer (or a similar switch probe) that is attached to an SD port. SD ports do not receive frames, instead they transmit a copy of the source traffic. The SPAN feature is nonintrusive and does not affect switching of network traffic for any SPAN source ports.

Auto Mode

Interfaces configured in auto mode can operate in one of the following modes: F port, E port, or TE port. The port mode is determined during interface initialization. For example, if the interface is connected to a node (host or disk), it operates in F port mode. If the interface is attached to a third-party switch, it operates in E port mode. If the interface is attached to another switch in the Cisco Nexus 5000 Series or Cisco MDS 9000 Family, it may become operational in TE port mode (see Chapter 1, “Configuring VSAN Trunking”).

SD ports are not determined during initialization and are administratively configured.

Interface States

The interface state depends on the administrative configuration of the interface and the dynamic state of the physical link. The following sections describe the states and configuration that influence the state:

Administrative States

The administrative state refers to the administrative configuration of the interface. Table 1-1 describes the administrative states.

Table 1-1 Administrative States

Administrative State	Description
Up	Interface is enabled.
Down	Interface is disabled. If you administratively disable an interface by shutting down that interface, the physical link layer state change is ignored.

Operational States

The operational state indicates the current operational state of the interface. Table 1-2 describes the operational states.

Table 1-2 Operational States

Operational State	Description
Up	Interface is transmitting or receiving traffic as desired. To be in this state, an interface must be administratively up, the interface link layer state must be up, and the interface initialization must be completed.
Down	Interface cannot transmit or receive (data) traffic.
Trunking	Interface is operational in TE mode.

Reason Codes

Reason codes are dependent on the operational state of the interface. Table 1-3 describes the reason codes for operational states.

Table 1-3 Reason Codes for Interface States

Administrative Configuration	Operational Status	Reason Code
Up	Up	None.
Down	Down	Administratively down. If you administratively configure an interface as down, you disable the interface. No traffic is received or transmitted.
Up	Down	See Table 1-4.

Note Only some of the reason codes are listed in Table 1-4.

If the administrative state is up and the operational state is down, the reason code differs based on the nonoperational reason code. Table 1-4 describes the reason codes for nonoperational states.

Table 1-4 Reason Codes for Nonoperational States

Reason Code (long version)	Description	Applicable Modes
Link failure or not connected	The physical layer link is not operational.	All
SFP not present	The small form-factor pluggable (SFP) hardware is not plugged in.	
Initializing	The physical layer link is operational and the protocol initialization is in progress.	All
Reconfigure fabric in progress	The fabric is currently being reconfigured.	
Offline	The switch software waits for the specified R_A_TOV time before retrying initialization.	
Inactive	The interface VSAN is deleted or is in a suspended state. To make the interface operational, assign that port to a configured and active VSAN.	
Hardware failure	A hardware failure is detected.	
Error disabled	Error conditions require administrative attention. Interfaces may be error-disabled for various reasons. For example: • Configuration failure. • Incompatible buffer-to-buffer credit configuration. To make the interface operational, you must first fix the error conditions causing this state and then administratively shut down or enable the interface.	
Isolation because limit of active port channels is exceeded.	The interface is isolated because the switch is already configured with the maximum number of active SAN port channels.	

Table 1-4 Reason Codes for Nonoperational States (continued)

Reason Code (long version)	Description	Applicable Modes
Isolation due to ELP failure	The port negotiation failed.	Only E ports and TE ports
Isolation due to ESC failure	The port negotiation failed.	
Isolation due to domain overlap	The Fibre Channel domains (fcdomain) overlap.	
Isolation due to domain ID assignment failure	The assigned domain ID is not valid.	
Isolation due to the other side of the link E port isolated	The E port at the other end of the link is isolated.	
Isolation due to invalid fabric reconfiguration	The port is isolated due to fabric reconfiguration.	
Isolation due to domain manager disabled	The fcdomain feature is disabled.	
Isolation due to zone merge failure	The zone merge operation failed.	
Isolation due to VSAN mismatch	The VSANs at both ends of an ISL are different.	
port channel administratively down	The interfaces belonging to the SAN port channel are down.	Only SAN port channel interfaces
Suspended due to incompatible speed	The interfaces belonging to the SAN port channel have incompatible speeds.	
Suspended due to incompatible mode	The interfaces belonging to the SAN port channel have incompatible modes.	
Suspended due to incompatible remote switch WWN	An improper connection is detected. All interfaces in a SAN port channel must be connected to the same pair of switches.	
Bound physical interface down	The Ethernet interface bound to a virtual Fibre Channel interface is not operational.	Only virtual Fibre Channel interfaces
STP not forwarding in FCoE mapped VLAN	The Ethernet interface bound to a virtual Fibre Channel interface is not in an STP forwarding state for the VLAN associated with the virtual Fibre Channel interface	Only virtual Fibre Channel interfaces

Buffer-to-Buffer Credits

Buffer-to-buffer credits (BB_credits) are a flow-control mechanism to ensure that Fibre Channel interfaces do not drop frames. BB_credits are negotiated on a per-hop basis.

In Cisco Nexus 5000 Series switches, the BB_credit mechanism is used on Fibre Channel interfaces but not on virtual Fibre Channel interfaces. Virtual Fibre Channel interfaces provide flow control based on capabilities of the underlying physical Ethernet interface.

The receive BB_credit value (fcrxbbcredit) may be configured for each Fibre Channel interface. In most cases, you do not need to modify the default configuration.

Note The receive BB_credit values depend on the port mode. For physical Fibre Channel interfaces, the default value is 16 for F mode and E mode interfaces. This value can be changed as required. The maximum value is 64.

Note For virtual Fibre Channel interfaces, BB_credits are not used.

Configuring Fibre Channel Interfaces

This section describes how to configure Fibre Channel interfaces, and includes the following topics:

Configuring a Fibre Channel Interface

To configure a Fibre Channel interface, perform this task:

	Command	Purpose
Step 1	`switch# configuration terminal`	Enters configuration mode.
Step 2	`switch(config)# interface {fc slot/port}|{vfc vfc-id}` `switch(config-if)#`	Selects a Fibre Channel interface and enters interface configuration mode. **Note** When a Fibre Channel interface is configured, it is automatically assigned a unique world wide name (WWN). If the interface's operational state is up, it is also assigned a Fibre Channel ID (FC ID).

To configure a range of interfaces, perform this task:

	Command	Purpose
Step 1	`switch# configuration terminal`	Enters configuration mode.

Step 2	`switch(config)# interface fc` *slot/port* `-` *port* `[ , fc` *slot/port* `-` *port* `]`
	
	or
	
	`switch(config)# interface vfc` *vfc-id* `-` *vfc-id* `[, vfc` *vfc-id* `-` *vfc-id* `]`
		Selects the range of Fibre Channel interfaces and enters interface configuration mode.

Setting the Interface Administrative State

To gracefully shut down an interface, perform this task:

	Command	Purpose
Step 1	`switch# configuration terminal`	Enters configuration mode.
Step 2	`switch(config)# interface {fc` *slot/port*`}|{vfc` *vfc-id*`}`	Selects a Fibre Channel interface and enters interface configuration mode.
Step 3	`switch(config-if)# shutdown`	Gracefully shuts down the interface and administratively disables traffic flow (default).

To enable traffic flow, perform this task:

	Command	Purpose
Step 1	`switch# configuration terminal`	Enters configuration mode.
Step 2	`switch(config)# interface {fc` *slot/port*`}|{vfc` *vfc-id*`}`	Selects a Fibre Channel interface and enters interface configuration mode.
Step 3	`switch(config-if)# no shutdown`	Enables traffic flow to administratively allow traffic when the **no** prefix is used (provided the operational state is up). A virtual Fibre Channel interface becomes operational if the bound Ethernet interface is operational and its STP port state is active.

Configuring Interface Modes

To configure the interface mode, perform this task:

	Command	Purpose
Step 1	`switch# configuration terminal`	Enters configuration mode.
Step 2	`switch(config)# interface {fc` *slot/port*`}|{vfc` *vfc-id*`}`	Selects a Fibre Channel interface and enters interface configuration mode.

	Command	Purpose
Step 3	`switch(config-if)# switchport mode F`	For a virtual Fibre Channel, only the F port mode is supported.
	`switch(config-if)# switchport mode E | F | SD | auto`	For a Fibre Channel interface, you can set the mode to E, F, or SD port mode. Set the mode to auto to auto-negotiate an E, F, TE port mode (not SD port mode) of operation. **Note** SD ports cannot be configured automatically. They must be administratively configured.

Configuring the Interface Description

Interface descriptions should help you identify the traffic or use for that interface. The interface description can be any alphanumeric string.

To configure a description for an interface, perform this task:

	Command	Purpose
Step 1	`switch# configuration terminal`	Enters configuration mode.
Step 2	`switch(config)# interface {fc slot/port}|{vfc vfc-id}`	Selects a Fibre Channel interface and enters interface configuration mode.
Step 3	`switch(config-if)# switchport description cisco-HBA2`	Configures the description of the interface. The string can be up to 80 characters long.
	`switch(config-if)# no switchport description`	Clears the description of the interface.

Configuring Port Speeds

Port speed can be configured on a physical Fibre Channel interface (but not on a virtual Fibre Channel interface). By default, the port speed for an interface is automatically calculated by the switch.

Caution Changing the interface speed is a disruptive operation.

To configure the port speed of the interface, perform this task:

	Command	Purpose
Step 1	`switch# configuration terminal`	Enters configuration mode.
Step 2	`switch(config)# interface fc slot/port`	Selects the specified interface and enters interface configuration mode.

	Command	Purpose
Step 3	`switch(config-if)# switchport speed 1000`	Configures the port speed of the interface to 1000 Mbps. The number indicates the speed in megabits per second (Mbps). You can set the speed to **1000** (for 1-Gbps interfaces), **2000** (for 2-Gbps interfaces), **4000** (for 4-Gbps interfaces), or **auto** (default).
	`switch(config-if)# no switchport speed`	Reverts the factory default (**auto**) administrative speed of the interface.

Autosensing

Autosensing speed is enabled on all 4-Gbps interfaces by default. This configuration enables the interfaces to operate at speeds of 1 Gbps, 2 Gbps, or 4 Gbps on the 4-Gbps ports. When autosensing is enabled for an interface operating in dedicated rate mode, 4-Gbps of bandwidth is reserved, even if the port negotiates at an operating speed of 1-Gbps or 2-Gbps.

Configuring SD Port Frame Encapsulation

The **switchport encap eisl** command only applies to SD port interfaces. This command determines the frame format for all frames transmitted by the interface in SD port mode. If the encapsulation is set to EISL, all outgoing frames are transmitted in the EISL frame format, for all SPAN sources.

The **switchport encap eisl** command is disabled by default. If you enable encapsulation, all outgoing frames are encapsulated, and you will see a new line (Encapsulation is eisl) in the **show interface** *SD_port_interface* command output.

Configuring Receive Data Field Size

You can configure the receive data field size for native Fibre Channel interfaces (but not for virtual Fibre Channel interfaces). If the default data field size is 2112 bytes, the frame length will be 2148 bytes.

To configure the receive data field size, perform this task:

	Command	Purpose
Step 1	`switch# configuration terminal`	Enters configuration mode.
Step 2	`switch(config)# interface fc` *slot/port*	Selects a Fibre Channel interface and enters interface configuration mode.
Step 3	`switch(config-if)# switchport fcrxbufsize 2000`	Reduces the data field size for the selected interface to 2000 bytes. The default is 2112 bytes and the range is from 256 to 2112 bytes.

Understanding Bit Error Thresholds

The bit error rate threshold is used by the switch to detect an increased error rate before performance degradation seriously affects traffic.

The bit errors can occur for the following reasons:

- Faulty or bad cable.

- Faulty or bad GBIC or SFP.
- GBIC or SFP is specified to operate at 1 Gbps but is used at 2 Gbps.
- GBIC or SFP is specified to operate at 2 Gbps but is used at 4 Gbps.
- Short haul cable is used for long haul or long haul cable is used for short haul.
- Momentary synchronization loss.
- Loose cable connection at one or both ends.
- Improper GBIC or SFP connection at one or both ends.

A bit error rate threshold is detected when 15 error bursts occur in a 5-minute period. By default, the switch disables the interface when the threshold is reached.

You can enter the **shutdown/no shutdown** command sequence to reenable the interface.

You can configure the switch to not disable an interface when the threshold is crossed.

To disable the bit error threshold for an interface, perform this task:

	Command	Purpose
Step 1	`switch# configuration terminal`	Enters configuration mode.
Step 2	`switch(config)# interface fc` *slot/port*	Selects a Fibre Channel interface and enters interface configuration mode.
Step 3	`switch(config-if)# switchport ignore bit-errors`	Prevents the detection of bit error threshold events from disabling the interface.
	`switch(config-if)# no switchport ignore bit-errors`	Prevents the detection of bit error threshold events from enabling the interface.

Note The switch generates a syslog message when bit error threshold events are detected, even if the interface is configured not to be disabled by bit-error threshold events.

Configuring Buffer-to-Buffer Credits

To configure BB_credits for a Fibre Channel interface, perform this task:

	Command	Purpose
Step 1	`switch# configuration terminal`	Enters configuration mode.
Step 2	`switch(config)# interface fc` *slot/port*	Selects a Fibre Channel interface and enters interface configuration mode.

	Command	Purpose
Step 3	`switch(config-if)# switchport fcrxbbcredit default`	Applies the default operational value to the selected interface. The operational value depends on the port mode. The default values are assigned based on the port capabilities.
	`switch(config-if)# switchport fcrxbbcredit 5`	Assigns a BB_credit of 5 to the selected interface. The range to assign BB_credits is between 1 and 64.
	`switch(config-if)# switchport fcrxbbcredit 5 mode E`	Assigns this value if the port is operating in E or TE mode. The range to assign BB_credits is between 1 and 64.
	`switch(config-if)# switchport fcrxbbcredit 5 mode Fx`	Assigns this value if the port is operating in F mode. The range to assign BB_credits is between 1 and 64.
Step 4	`switch(config-if# do show int fc` *slot/port*	Displays the receive and transmit BB_credit along with other pertinent interface information for this interface. **Note** The BB_credit values are correct at the time the registers are read. They are useful to verify situations when the data traffic is slow.

Configuring Global Attributes for Fibre Channel Interfaces

This section describes configuration for global attributes that apply to all Fibre Channel interfaces on the switch. This section includes the following topics:

Configuring Switch Port Attribute Default Values

You can configure attribute default values for various switch port attributes. These attributes will be applied globally to all future switch port configurations, even if you do not individually specify them at that time.

To configure switch port attributes, perform this task:

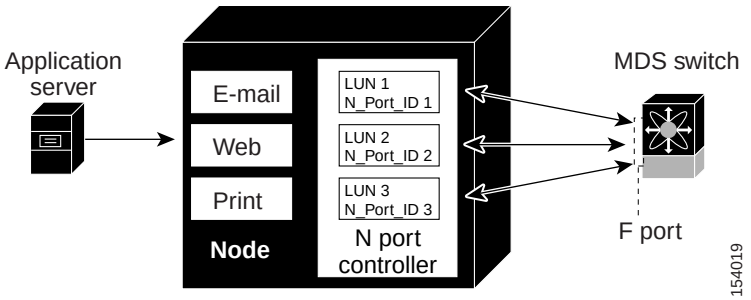
	Command	Purpose
Step 1	`switch# configuration terminal`	Enters configuration mode.

	Command	Purpose
Step 2	`switch(config)# no system default switchport shutdown san`	Configures the default setting for administrative state of an interface as Up. (The factory default setting is Down). **Tip** This command is applicable only to interfaces for which no user configuration exists for the administrative state.
	`switch(config)# system default switchport shutdown san`	Configures the default setting for administrative state of an interface as Down. This is the factory default setting. **Tip** This command is applicable only to interfaces for which no user configuration exists for the administrative state.
	`switch(config)# system default switchport trunk mode auto`	Configures the default setting for administrative trunk mode state of an interface as Auto. **Note** The default setting is trunk mode on.

About N Port Identifier Virtualization

N port identifier virtualization (NPIV) provides a means to assign multiple FC IDs to a single N port. This feature allows multiple applications on the N port to use different identifiers and allows access control, zoning, and port security to be implemented at the application level. Figure 1-2 shows an example application using NPIV.

Figure 1-2 NPIV Example



Enabling N Port Identifier Virtualization

You must globally enable NPIV for all VSANs on the switch to allow the NPIV-enabled applications to use multiple N port identifiers.

Note All of the N port identifiers are allocated in the same VSAN.

To enable or disable NPIV on the switch, perform this task:

	Command	Purpose
Step 1	`switch# configuration terminal`	Enters configuration mode.
Step 2	`switch(config)# npiv enable`	Enables NPIV for all VSANs on the switch.
Step 3	`switch(config)# no npiv enable`	Disables (default) NPIV on the switch.

Verifying Fibre Channel Interfaces

The following topics describe the commands for displaying Fibre Channel interfaces:

Verifying SFP Transmitter Types

The SPF transmitter type can be displayed for a physical Fibre Channel interface (but not for a virtual Fibre Channel).

The small form-factor pluggable (SFP) hardware transmitters are identified by their acronyms when displayed in the **show interface brief** command. If the related SFP has a Cisco-assigned extended ID, then the **show interface** and **show interface brief** commands display the ID instead of the transmitter type. The **show interface transceiver** command and the **show interface fc** *slot*/*port* **transceiver** command display both values for Cisco supported SFPs.

Verifying Interface Information

The **show interface** command displays interface configurations. If no arguments are provided, this command displays the information for all the configured interfaces in the switch.

You can also specify arguments (a range of interfaces or multiple, specified interfaces) to display interface information. You can specify a range of interfaces by entering a command with the following example format:

```
interface fc2/1 - 4 , fc3/2 - 3
```

The following example shows how to display all interfaces:

```
switch# show interface
fc3/1 is up
...
fc3/3 is up
...
Ethernet1/3 is up
...
mgmt0 is up
...
vethernet1/1 is up
...
vfc 1 is up
...
```

The following example shows how to display multiple specified interfaces:

```
switch# show interface fc3/1 , fc3/3
fc3/1 is up
...
fc3/3 is up
...
```

The following example shows how to display a specific interface:

```
switch# show interface vfc 1
vfc 1 is up
...
```

The following example shows how to display interface descriptions:

```
switch# show interface description
--------------------------------------------------------------------------------
Interface          Description
--------------------------------------------------------------------------------
fc3/1              test intest
Ethernet1/1              --
vfc 1              --
...
```

The following example shows how to display all interfaces in brief:

```
switch# show interface brief
```

The following example shows how to display interface counters:

```
switch# show interface counters
```

The following example shows how to display transceiver information for a specific interface:

```
switch# show interface fc3/1 transceiver
```

Note The **show interface transceiver** command is only valid if the SFP is present.

The **show running-configuration** command displays the entire running configuration with information for all interfaces. The interfaces have multiple entries in the configuration files to ensure that the interface configuration commands execute in the correct order when the switch reloads. If you display the running configuration for a specific interface, all the configuration commands for that interface are grouped together.

The following example shows the interface display when showing the running configuration for all interfaces:

```
switch# show running configuration
...
interface fc3/5
  switchport speed 2000
...
interface fc3/5
  switchport mode E
...
interface fc3/5
  channel-group 11 force
  no shutdown
```

The following example shows the interface display when showing the running configuration for a specific interface:

```
switch# show running configuration fc3/5
interface fc3/5
  switchport speed 2000
  switchport mode E
  channel-group 11 force
  no shutdown
```

Verifying BB_Credit Information

The following example shows how to display the BB_credit information for all Fibre Channel interfaces:

```
switch# show interface bbcredit
...
fc2/3 is trunking
    Transmit B2B Credit is 255
    Receive B2B Credit is 12
    Receive B2B Credit performance buffers is 375
      12 receive B2B credit remaining
      255 transmit B2B credit remaining
```

Default Settings

Table 1-5 lists the default settings for native Fibre Channel interface parameters.

Table 1-5 Default Native Fibre Channel Interface Parameters

Parameters	Default
Interface mode	Auto
Interface speed	Auto
Administrative state	Shutdown (unless changed during initial setup)
Trunk mode	On (unless changed during initial setup)
Trunk-allowed VSANs	1 to 4093
Interface VSAN	Default VSAN (1)
Beacon mode	Off (disabled)
EISL encapsulation	Disabled
Data field size	2112 bytes

Table 1-5 lists the default settings for virtual Fibre Channel interface parameters.

Table 1-6 Default Virtual Fibre Channel Interface Parameters

Parameters	Default
Interface mode	Auto
Interface speed	n/a
Administrative state	Shutdown (unless changed during initial setup)
Trunk mode	n/a

Table 1-6 Default Virtual Fibre Channel Interface Parameters (continued)

Parameters	Default
Trunk-allowed VSANs	n/a
Interface VSAN	Default VSAN (1)
EISL encapsulation	n/a
Data field size	n/a