CHAPTER 3

Chassis Tasks

These topics describe the Chassis display tasks:

Viewing Cards on a Chassis

These topics describe how to view information about cards in the chassis, set the up/down administrative status of a card, configure the Beacon status of a card, and reset a card:

Viewing Card Summary Information

To view the cards on your chassis, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Cards** branch.

A table that includes all cards on the chassis appears in the View frame. Table 3-1 describes the fields in the Cards table.

Table 3-1 Cards Table Field Descriptions

Field	Description
Slot	Number of the chassis slot in which the card resides.
Type	Type of the card.
Current Status	Displays up if the card can currently run traffic; otherwise, displays down**.**
Operational State	Displays the general condition of the interface card. The general condition may appear as any of the following: • unknown • normal • bootFailed • tooHot • booting • checkingBootImage • wrongBootImage • rebooting • standby • recoveryImage A condition of unknown indicates an unsupported interface card. To address this condition, replace the card with a supported card. The operational state of a card must appear as normal for the current status of the card to appear as up. A wrongBootImage condition indicates that the active system image on the interface card does not match the active system image on the controller. All cards must run the same active system image as the controller card. A bootFailed condition indicates that the active system image on the card was incompletely or incorrectly loaded. If the other interface cards come up successfully, reset the individual card. Otherwise, reboot your entire device. The tooHot condition indicates that the card is overheating. Expand **Chassis** and select the **Fans** branch to see if your fans have failed. The booting condition indicates that the card has not finished loading the necessary image data for the internal configuration.

Table 3-1 Cards Table Field Descriptions (continued)

Field	Description
Boot Stage	Boot Stage appears as one of the following: • recovery • ipl • ppcboot • fpga • pic • ib • rootfs • kernel • exe • done • none
Boot Status	Boot Status may appear as any of the following: • upgrading • success • failed • badVersion • badCrc • memoryError • outOfSpace • programmingError • hardwareError • fileNotFound • inProgress • none

Step 3 (Optional) Click **Refresh** to update the attributes in the display.

Viewing Card Properties

To view card properties, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Cards** branch.

A Cards table that includes all cards in the chassis appears. A radio button appears to the left of each table entry.

Step 3 Click the radio button of the card whose properties you want to view.

Step 4 Click **Properties**.

A Card Properties window opens. Table 3-2 describes the fields in the Card Properties window.

Table 3-2 Card Properties Window Field Descriptions

Field	Description
Slot ID	Number of the chassis slot in which the card resides.
Type	Type of the card.
Admin Status	Displays the up and down radio buttons. Click a radio button, and then click **Apply** to change the administrative status and bring the port up or down.
Current Status	Displays up if the card can currently run traffic; otherwise, displays down**.**
Operational State	Displays the general condition of the interface card. The general condition may be any of the following: • unknown • normal • wrong-image • bootFailed • tooHot • booting A condition of unknown indicates an unsupported interface card. To address this condition, replace the card with a supported card. The operational state of a card must appear as normal for the current status of the card to appear as up. A wrong-image condition indicates that the active system image on the interface card does not match the active system image on the controller. All cards must run the same active system image as the controller card to function. A bootFailed condition indicates that the active system image on the card was incompletely or incorrectly loaded. If the other interface cards come up successfully, reset the individual card. Otherwise, reboot your entire device. If your card overheats, the tooHot condition appears in the **show card** command output. Enter the **show fan** command to check if your fans have failed. The booting condition indicates that the card has not finished loading necessary image data for internal configuration.
Boot Stage	Boot Stage appears as one of the following: • recovery • ipl • ppcboot • fpga • pic • ib • rootfs • kernel • exe • done • none

Table 3-2 Card Properties Window Field Descriptions (continued)

Field	Description
Boot Status field	Boot Status may appear as any of the following: • upgrading • success • failed • badVersion • badCrc • memoryError • outOfSpace • programmingError • hardwareError • fileNotFound • inProgress • none
Beacon Status	Displays the LED beaconing status of the card. Click the **on** or **off** radio button to turn the card to the LED beaconing status. After the status is set, the LED beaconing button blinks.
Serial Number	Factory-assigned product serial number of the card.
PCA Serial Number	Printed circuit assembly (PCA) serial number of the card.
PCA Assembly Number	Printed circuit assembly (PCA) number of the card.
FRU Number	Field-replaceable unit (FRU) number of the card.
Product Version ID	The ID number of the version of the card.
Action (select cards only)	Radio buttons list actions that you can apply to the card.
Result (select cards only)	Result that occurs when you choose an action from the Action field and click **Apply**.

Viewing the Card Inventory

To view the memory and image information on a card, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Cards** branch.

The Cards table appears in the View frame.

Step 3 Click the radio button next to the card whose inventory you want to view.

Step 4 Click **Inventory**.

The Card Inventory window opens. Table 3-3 describes the fields in this window.

Table 3-3 Card Inventory Window Field Descriptions

Field	Description
Slot ID	Slot on the server switch in which the card resides.
Used Memory	Used memory on the card, in kilobytes.
Free Memory	Available memory on the device, in kilobytes.
Used Disk Space a	Used disk space on partition a, in kilobytes.
Free Disk Space a	Available disk space on partition a, in kilobytes.
Used Disk Space b	Used disk space on partition b, in kilobytes.
Free Disk Space b	Available disk space on partition b, in kilobytes.
Current Image Source	Image that the card runs on the active operating system.
Image Source for Next Reboot	Image that the card runs when you reboot.
Last Image Source image a	Displays the Image used, when the card was booted up.
Image-a	First image on partition a, stored on the card.
Image-a	Second image on partition a, stored on the card.
Last Image Source image b	Displays the Image used, when the card was booted up.
Image-b	First image on partition b, stored on the card.
Image-b	Second image on partition b, stored on the card.
CPU Description	Description of the CPU on the card.
FPGA Firmware Revision (select cards)	Current FPGA firmware version that the card runs.
IB Firmware Revision	Version of InfiniBand firmware on the card. For platforms designed with the InfiniScale III switch chip (7000 and 7008 platforms), the Chassis Manager displays the device ID and version number of the InfiniBand chip for each card. For platforms using the original InfiniScale switch chip (3001 and 3012 platforms), no parenthetical text appears. The Cisco SFS 3001 and Cisco SFS 3012 chassis run original InfiniScale switch chips. The Cisco SFS 7000 and Cisco SFS 7008 chassis run later versions.
Card Uptime	How long, in seconds, the card has been running.

Table 3-3 Card Inventory Window Field Descriptions (continued)

Field	Description
Close	Closes the Card Inventory window.
Help	Opens the online help.

Configuring the Administrative Status of a Card

With Chassis Manager, you can bring up or shut down any card on your chassis. To configure the administrative status of a card, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Cards** branch.

A table of the cards in the chassis appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button of the card that you want to configure.

Step 4 Click **Properties**.

A Card Properties window opens.

Step 5 In the Admin Status field, click the **up** or **down** radio button, and then click **Apply**.

Configuring the LED Beacon Status of a Card

To configure the LED Beacon Status of a card on your chassis, follow these steps:

Step 1 Expand Chassis in the Tree frame.

Step 2 Select the Cards branch.

A table of the cards in the Chassis appears in the View frame. A radio button appears to the left of each the table entry.

Step 3 Click the radio button of the card whose LED Beacon Satus you want to configure.

Step 4 Click **Properties**.

A Card Properties window opens.

Step 5 In the Beacon Status field, click the **on** or **off** radio button, and then click **Apply**.

Resetting a Card

To reset a card on your chassis, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Cards** branch.

A Cards table that includes all cards in the chassis appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button to the left of the card that you want to reset.

Step 4 Click **Properties**.

A Card Properties window opens.

Step 5 In the Action field, click the **reset** radio button, and then click **Apply**.

Viewing Internal Gateway Ports

Each Fibre Channel gateway and Ethernet gateway uses two internal ports to pass traffic through your device.

Note Not all hardware platforms provide this option.

To view gateway port details, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Cards** branch.

A Cards table that includes all cards in the chassis appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button to the left of the card with the gateway (internal) ports that you want to view.

Step 4 From the Show Options drop-down menu, choose **Show Gateway Ports**.

The Gateway Ports table opens in the View frame. For a description of the fields in the Gateway Ports table, see Table 3-4.

Table 3-4 Gateway Ports Table Field Descriptions

Field	Description
GW Port	Port number, in slot#/port# format.
Name	Port name.
Type	Port type.

Viewing Physical Ports on a Chassis

These topics describe how to view ports on a chassis:

Viewing All Ports

To view the physical ports on your device, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

A table that includes all ports on the chassis appears in the View frame. Table 3-5 describes the fields in the Ports table.

Table 3-5 Ports Display Field Descriptions

Field	Description
Port	Slot#/port# identifier of the port.
Name	User-configured port name.
Type	Displays the type of the port. Type names begin with fc to indicate Fibre Channel, en to indicate Ethernet, and ib to indicate InfiniBand.
Admin Status	Displays up when you bring up the port; otherwise, displays down.
Oper Status	Indicates whether or not the port is ready for use.
MTU	Maximum transmission unit (MTU) of the port, in bytes.

Step 3 (Optional) Click **Refresh** to update the attributes in the display.

Viewing Port Properties

To view port properties, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

A Ports table that includes all ports in the chassis appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button of the port whose properties you want to view.

Step 4 Click **Properties**.

The Port Properties window opens. Each type of port displays different properties in this window.

Note Available port types vary by hardware platform.

Table 3-6 describes the fields in the Port Properties window of an Ethernet port.

Table 3-6 Ethernet Port Properties Window Field Descriptions

Field	Description
Port	Port number in slot#/port# notation.
Name	Port name that you can edit and apply to the port.
Type	Type of the port.
Admin Status	Configures the administrative status of the port with up and down radio buttons.
Oper Status	Indicates whether or not the port is ready for use.
Auto Negotiation Supported	Displays true if the port supports auto-negotiation.
Auto Negotiation	The Enable check box enables or disables auto-negotiation on the port.
Set Port Speed	Radio buttons that let you configure the speed of the port.
Current Speed	Displays the speed of the port.
Set Port Duplex	(Ethernet Gateway ports) Radio buttons configure duplex setting of the port.
Current Duplex	(Ethernet Gateway ports) Indicates whether the port runs in full duplex mode or half duplex mode.
MTU field	Displays the maximum transmission unit (MTU) of the port in bytes.
MAC Address	(Ethernet Gateway ports) Flushes the address resolution protocol table.
Last Changed On	Time and date of the last time that the port was configured.
Action	(Ethernet Gateway ports) Flushes the address resolution protocol table when you choose the **flushArp** radio button, and then click **Apply**. Executes no action if you choose the **none** radio button and click **Apply**.
Result	(Ethernet Gateway ports) Displays result of the action in the Action field.

Table 3-7 describes the fields in the Port Properties window of a Fibre Channel port.

Table 3-7 Fibre Channel Port Properties Window Field Descriptions

Field	Description
Port	Port number in slot#/port# notation.
Name	Port name that you can edit and apply to the port.
Type	Displays the type of the port.
Admin Status	Up and down radio buttons that configure the administrative status of the port.
Oper Status	Displays up to indicate that the port is physically ready for use, otherwise, displays down.
Auto Negotiation Supported	Displays true if the port supports autonegotiation.
Auto Negotiation	The Enable check box enables or disables autonegotiation on the port.
Set Port Speed	Displays radio buttons to configure the port speed. The speeds available are 1G, 2G, and 4G.
Current Speed	Displays the speed of the port.
Admin Connection Type	Displays radio buttons to indicate the type of the administrative connection.
Current Connection Type	Type of connection that the server switch dynamically discovered for this port.
MTU	Maximum transmission unit (MTU) of the port, in bytes.
WWNN	World-wide node name (WWNN) of your device.
WWPN	World-wide port name (WWPN) of the port.
FC ID	Fibre Channel Protocol (FCP) identifier of the port.
Last Changed On	Time and date of the last time that a user configured the port.
Principle Switch WWNN	Displays a 64-bit WWNN of the principle Fibre Channel the port is associated to.
Dist Services Timeout	Displays the FC E Port d_s_tov (this value indicates the time the distributed services requester has to wait for a response) in milliseconds.
Error Detect Timeout	Displays the FC E Port e_d_tov (timeout value required to detect an error condition) in milliseconds. All the VSAN switches are configured with the same value. If the administrative state of the VSAN is configured to active state, the Reset operation results in an error.
Fabric Stability Timeout	Displays the FC E Port f_s_tov (timeout value required to ensure that the fabric stability is acheived during fabric configurarion) in milliseconds. This value is common for all the VSANs.
Receive Transmission Timeout	Displays the FC E Port r_t_tov (timeout value required to recieve a transmission) in milliseconds.

Table 3-7 Fibre Channel Port Properties Window Field Descriptions (continued)

Field	Description
Resource Alloc Timeout	Displays the FC E Port r_a_tov (timeout value required to determine the time for reuse of a NxPort resource) in milliseconds.
Check Age	Displays the FC E Port CheckAge in seconds.
Hello Dead Interval	Displays the FC HelloDeadInterval in seconds.
Hello Interval	Displays the FC HelloInterval in seconds.
Link State Ack Interval	Displays the FC E_Port l_t_tov in seconds.
Link State Refresh Time	Displays the timevalue interval required to refresh the link state.
Maximum Age	Displays the Fibre Channel E_Port m_a_tov in minutes.
Admin Domain ID	Displays the Fibre Channel E_Port configured Domain ID. The InteropMode determines the range. Value zero is used if a DomainID is not configure in which case, the FC gateway tries to get the assigned OperDomainID from the fabric. If a non-zero value is configured, this value is used as a static DomainID.
Oper Domain ID	Displays the Fibre Channel port runtime ID.
Interop Mode	Displays the interoperability of the local switches on this VSAN. The modes available are as follows: • Native • BrocadeandMCData • Brocadelessthan16ports • Brocademorethan16ports • MCDataNative
Connection Error Code	Displays the Fibre Channel connection error code.
Port WWNN	Displays the WWNN of the configured port.

Table 3-8 describes the fields in the Port Properties window of an InfiniBand port.

Table 3-8 InfiniBand Port Properties Window Field Descriptions

Field	Description
Port	Port number in slot#/port# notation.
Name	Port name that you can edit and apply to the port.
Type	Type of the port.
Admin Status	Up and down radio buttons configure the administrative status of the port.
Oper Status	Displays up to indicate that the port is physically ready for use; otherwise, displays down.
Auto Negotiation Supported	Displays true if the port supports autonegotiation.
Auto Negotiation	Enable check box to enable or disable autonegotiation on the port.

Table 3-8 InfiniBand Port Properties Window Field Descriptions (continued)

Field	Description
Set Port Speed	Drop-down menu configures the link capacity of the port according to its link width (1x, 4x, or 12x) and its lane speed (SDR or DDR). Valid options are 1x-SDR (2.5 Gbps), 4x-SDR (10 Gbps), 12x-SDR (30 Gbps), 1x-DDR (5 Gbps), 4x-DDR (20 Gbps), 12x-DDR (60 Gbps). **Note** For an InfiniBand port connected with an SDR cable or any cable longer than 8 feet, you must manually configure the port to support SDR only.
Current Speed	Link capacity of the port.
Physical State	Physical state of the port.
Clear Counters	Check box allows you to clear the counters for the InfiniBand port.
MTU	Maximum transmission unit (MTU) of the port in bytes.
Last Changed On	Time and date of the last time that a user configured the port.

Viewing Port Bridging Properties

To view the bridge to which a port belongs, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

A Ports table appears that includes all ports in the chassis that appear in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button next to the port whose bridging properties you want to view.

Step 4 Choose **Show Bridging** from the Show Options drop-down menu.

The Port Bridging table appears in the View frame. Table 3-9 describes the fields in this table.

Table 3-9 Port Bridging Table Field Descriptions

Field	Description
Port	Port that you chose from the Ports table.
Vlan	Virtual LAN (VLAN) of the bridge to which the port belongs.
Bridge ID	Bridge ID of the bridge to which the port belongs.

Viewing Port Statistics

To view port statistics, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

The Ports table appears in the View frame.

Step 3 Click the radio button next to the port whose statistics you want to view.

Step 4 From the Show Options drop-down menu, choose **Show Port Statistics**.

The Port Statistics display appears in the View frame. Table 3-10 describes the fields in this display.

Table 3-10 Port Statistics Display Field Descriptions

Field	Description
Port	Port number, as assigned by the subnet manager.
Name	Administratively assigned port name.
In Octets	Cumulative number of octets that arrived at the port, including framing characters.
In Unicast Packets	Cumulative number of incoming packets destined for a single port.
In Multicast Packets	Cumulative number of incoming packets destined for the ports of a multicast group.
In Broadcast Packets	Cumulative number of incoming packets destined for all ports on the fabric.
In Discards	Cumulative number of inbound packets that the port discarded for a reason other than a packet error (lack of buffer space).
In Errors	Number of inbound packets with errors that the port discarded.
In Unknown Protocols	For packet-oriented interfaces, the number of packets received through the interface that were discarded because of an unknown or unsupported protocol. For character-oriented or fixed-length interfaces that support protocol multiplexing, the number of transmission units received through the interface that were discarded because of an unknown or unsupported protocol. For any interface that does not support protocol multiplexing, this counter is always 0.
Out Octets	Total number of octets transmitted out of the interface, including framing characters.
Out Unicast Packets	Total number of packets that higher-level protocols requested be transmitted and were not addressed to a multicast or broadcast address at this sublayer, including those packets that were discarded or not sent.
Out Multicast Packets	Total number of packets that higher-level protocols requested be transmitted and were addressed to a multicast address at this sublayer, including those packets that were discarded or not sent. For a MAC layer protocol, this includes both Group and Functional addresses.
Out Broadcast Packets	Total number of packets that higher-level protocols requested to be transmitted and were addressed to a broadcast address at this sublayer, including those packets that were discarded or not sent.

Table 3-10 Port Statistics Display Field Descriptions (continued)

Field	Description
Out Discards	Number of outbound packets that were chosen to be discarded even though no errors had been detected to prevent their transmission. One possible reason for discarding such a packet could be to free buffer space.
Out Errors	For packet-oriented interfaces, the number of outbound packets that could not be transmitted because of errors. For character-oriented or fixed-length interfaces, the number of outbound transmission units that could not be transmitted because of errors.

Viewing Port Small Form-Factor Pluggable

To view the Port Small Form-Factor Pluggable(SFP) present in a Fibre Channel port, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select **Ports** branch.

The Ports table appears in the View frame.

Step 3 Click the radio button next to the port whose statistics you want to view.

Step 4 From the Show Options drop-down menu, choose **Show SFP.**

Step 5 The Show SFP display appears in the View frame. Table 3-11 describes the fields in this play.

Table 3-11 SFP Display Field Descriptions

Field	Description
State	State of the SFP on a Fibre Channel port
Product Id	Interger-value identifier of the SCSI product
Vendor Id	Interger-value identifier of the SCSI vendor
Vendor Serial Number	SFP vendor serial number
CLEI Code	SFP CLEI code
Cisco Part Number	CFP Cisco part number
VID	SFP VID

Note The **Show SFP** option is valid only for the Fibre Channel ports.

Viewing Port VSAN

To view the VSAN present on a Fibre Channel port, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select **Ports** branch.

The Ports table appears in the View frame.

Step 3 Click the radio button next to the port whose VSAN you want to view.

Step 4 From the Show Options drop-down menu, choose **Show VSAN.**

The Show VSAN display appears in the View frame. Table 3-12 describes the fields in this display.

Table 3-12 VSAN Display Field Descriptions

Field	Description
VSAN ID	Interger-value identifier of the VSAN of a Fibre Channel. The values ranges from 1to 4093.
Current VSAN ID	Interger-value identifier of the current VSAN assigned to the Fibre Channel.
Trunk Mode	The available modes of the trunk group for a Fibre Channel. The modes available are nonTrunk, trunk and auto.
Current Trunk Mode	The current mode of the trunk group assigned to the Fibre Channel.
Allowed VSANs	The number of VSANs which can be configured to a Fibre Channel.
Active VSANs	The number of active VSANs currently configured to the Fibre Channel.
Up VSANs	The number of VSANs with an activated (up) status.

Configuring Ports

Chassis Manager provides different configuration options for each type of port. The options available to each port will appear in the Port Properties window.

These topics describe how to configure port properties:

- Configuring a Port Name, page 3-17
- Configuring the Administrative Status of a Card, page 3-7
- Enabling or Disabling a Port, page 3-18
- Configuring Autonegotiation on a Port, page 3-18
- Configuring Port Speed, page 3-18

Configuring a Port Name

To configure the administrative name of a port, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

The Ports table appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button of the port to which you want to assign a name.

Step 4 Click **Properties**.

The Port Properties window opens.

Step 5 In the Name field of the Port Properties window, enter a name for the port, and then click **Apply**.

Step 6 Click **Close** to close the Port Properties window.

Configuring the Administrative Status of a Port

To configure the administrative status of a port, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

A table of the Ports in the chassis appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button of a port that you want to configure.

Step 4 Click **Properties**.

A Port Properties window opens.

In the Admin Status field, click the **up** or **down** radio button, and then click **Apply**.

Step 5 Click Close to close the Port Properties window.

Enabling or Disabling a Port

To enable or disable a port, follow these steps:

Step 1 Expand the **Chassis** icon in the Tree frame.

Step 2 Select the **Ports** branch.

The Ports table appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button of the port you want to enable or disable.

Step 4 Click **Properties**.

The Port Properties window opens.

Step 5 In the Admin Status field of the Port Properties window, click the **up** (enable) or **down** (disable) radio button, and then click **Apply**.

Step 6 Click **Close** to close the Port Properties window.

Configuring Autonegotiation on a Port

To enable or disable auto-negotiation on a port, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

The Ports table appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button of the port for which you want to enable or disable autonegotiation.

Step 4 Click **Properties**.

The Port Properties window opens.

Step 5 In the Auto Negotiation field of the Port Properties window, check the **Enable** check box to enable it, or uncheck the check box to disable it, and then click **Apply**.

Step 6 Click **Close** to close the Port Properties window.

Configuring Port Speed

Note You must disable autonegotiation before configuring the port speed.

For an InfiniBand port connected with an SDR cable or any cable longer than 8 feet, you must manually configure the port to support SDR only.

To configure the speed of a port, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

The Ports table appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button of the port for which you want to configure the speed.

Step 4 Click **Properties**.

The Port Properties window opens.

Step 5 In the Auto Negotiation field, uncheck the **Enable** check box (if necessary) to disable autonegotiation.

Step 6 In the Set Port Speed field of the Port Properties window, select a speed as follows:

- For an Ethernet or Fibre Channel port, click a radio button to select a speed.
- For an InfiniBand port, select a speed from the drop-down menu.

Step 7 Click **Apply**.

Step 8 Click **Close** to close the Port Properties window.

Clearing InfiniBand Port Counters

To clear InfiniBand port counters, follow these steps:

Step 1 Expand **Chassis** in the Tree frame, and select the **Ports** branch.

The Ports table appears in the View frame. A radio button appears to the left of each table entry.

Step 2 Click the radio button of the port for which you want to clear the counters.

Step 3 Click **Properties**.

The Port Properties window opens.

Step 4 Check the **Clear Counters** check box.

Step 5 Click **Apply**, and then click **Close**.

See Table 3-10 on page 3-14 for descriptions of the counters cleared by this procedure.

Configuring the Administrative Connection Type of a Port

To configure the administrative connection type for a port, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

A table of the Ports in the chassis appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button of a Fibre Channel port that you want to configure.

Step 4 Click **Properties**.

A Port Properties window opens.

Step 5 In the Admin Connection Type field, click the radio button to select the type of connection that you want to configure. The available options are as follow:

- NLPort
- BPort
- FPort
- EPort
- EorFPort

Step 6 Click **Apply** and then click **Close** to close the Properties window.

Configuring the Interop Mode of a Port

To configure the Interop Mode of a port, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

A table of the Ports in the chassis appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button of a Fibre Channel port that you want to configure.

Step 4 Click **Properties**.

A Port Properties window opens.

Step 5 In the Interop Mode field, click the radio button to select the type of mode you want to configure. The available options are as follow:

- Native
- Brocadeand MCData
- Brocadelessthan16Ports
- Brocademorethan16Ports
- MCDataNative

Step 6 Click **Apply** and then click **Close** to close the Properties window.

Configuring the Distributed Services Timeout

To configure the distributed services timeout, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

A table of the Ports in the chassis appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button of a Fibre Channel port that you want to configure.

Step 4 Click **Properties**.

A Port Properties window opens.

Step 5 Enter an interger (5000–100000) in the Dist Services Timeout field to configure the time required, in milliseconds, by the requester to wait for a response.

Step 6 Click **Apply** and then click **Close** to close the Properties window.

Configuring the Error Detect Timeout

To configure the error detect timeout, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

A table of the Ports in the chassis appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button of a Fibre Channel port that you want to configure.

Step 4 Click **Properties**.

A Port Properties window opens.

Step 5 Enter an interger (1000–100000) in the Error Detect Timeout field to configure the time required, in milliseconds, to detect an error condition.

Step 6 Click **Apply** and then click **Close** to close the Properties window.

Configuring the Resource Allocation Time

To configure the resource allocation timeout, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

A table of the Ports in the chassis appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button of a Fibre Channel port that you want to configure.

Step 4 Click **Properties**.

A Port Properties window opens.

Step 5 Enter an interger (5000–100000) in the Resource Alloc Timeout field to configure the time required, in millliseconds, to determine the resuse of a N x Port resource.

Step 6 Click **Apply,** and then click **Close** to close the Properties window.

Configuring the Hello Dead Interval

To configure the hello dead interval, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

A table of the Ports in the chassis appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button of a Fibre Channel port that you want to configure.

Step 4 Click **Properties**.

A Port Properties window opens.

Step 5 Enter an interger (2–65535) in the Hello Dead Interval field to configure the time required (in seconds).

Step 6 Click **Apply** and then click **Close** to close the Properties window.

Configuring the Hello Interval

To configure the hello interval, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

A table of the Ports in the chassis appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button of a Fibre Channel port that you want to configure.

Step 4 Click **Properties**.

A Port Properties window opens.

Step 5 Enter an interger (2–65535) in the Hello Interval field to configure the time required (in seconds).

Step 6 Click **Apply** and then click **Close** to close the Properties window.

Configuring the Link State Ack Interval

To configure the Link State Ack Interval, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

A table of the Ports in the chassis appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button of a Fibre Channel port that you want to configure.

Step 4 Click **Properties**.

A Port Properties window opens.

Step 5 Enter an interger (1–65535) in the Link State Ack Interval field to configure the time required (in seconds).

Step 6 Click **Apply** and then click **Close** to close the Properties window.

Configuring the Administrative Oper Domain ID

To configure the administrative oper domain ID, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

A table of the Ports in the chassis appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button of a Fibre Channel port that you want to configure.

Step 4 Click **Properties**.

A Port Properties window opens.

Step 5 Enter an interger ( ) in the Admin Oper Domain ID to configure the admin oper domain ID. If a nonzero value is configured, this value is used as a static Domain ID. Values from 0–255 can be entered.

Step 6 Click **Apply,** and then click **Close** to close the Properties window.

Configuring the Port WWNN

To configure the World-wide node name (WWNN), follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

A table of the Ports in the chassis appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button of a Fibre Channel port that you want to configure.

Step 4 Click **Properties**.

A Port Properties window opens.

Step 5 Enter the value for the WWNN in the Port WWNN field to configure the name of the Port WWNN.

Step 6 Click **Apply,** and then click **Close** to close the Properties window.

Configuring Port VSAN

To configure the VSANs present on the Fibre Channel ports, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Ports** branch.

The Ports table appears in the View frame. A radio button appears to the left of each table entry.

Step 3 Click the radio button of the Fibre Channel port you want to configure.

Step 4 From the Show Options drop-down menu, choose **Show VSAN.**

The Port VSAN window opens, in the view frame.

Step 5 (Optional) Enter an interger-value identifier value in the VSAN ID field.

Step 6 Click the radio button to select the trunk mode in the Trunk Mode field. The available options are nonTrunk, Trunk, and auto.

Step 7 Enter the number of VSANs allowed on the selected Port, and then click **Apply**.

Viewing Power Supply Status

These topics describe how to view information about power supplies:

- Viewing Power Supply Summary Information, page 3-24
- Viewing Power Supply Properties, page 3-25

Viewing Power Supply Summary Information

To view the status of the power supplies on your device, follow these steps:

Note Not all hardware platforms include power supply information. In such cases, the Power Supplies branch does not appear.

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Power Supplies** branch.

The Power Supplies table appears in the View frame. Table 3-13 describes the fields in the Power Supplies table.

Table 3-13 Power Supply Table Field Descriptions

Field	Description
PS ID	Numeric identifier of the power supply. For more information about the power supplies in your device, see the hardware installation guide for your server switch.
Type	Type of power (AC or DC).
Admin Status	Displays up if you have activated your power supply or down (on select chassis) if you have disabled your power supply.
Current Status	Displays up to indicate that your power supply functions and currently supplies power to your device. Displays down for faulty power supplies.
Utilization	Percentage of total power supply resources in use.
Voltage	Voltage of the power supply.

Viewing Power Supply Properties

To view the properties of the power supplies on your device, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Power Supplies** branch.

The Power Supplies table appears in the View frame.

Step 3 Click the radio button next to the power supply with properties that you want to view.

Step 4 Click **Properties**.

The Power Supply Properties window opens. Table 3-14 describes the fields in the Power Supplies Properties table.

Table 3-14 Power Supply Property Window Field Descriptions

Field	Description
PS ID	Numeric identifier of the power supply. For more information about the power supplies in your device, see the hardware installation guide for your server switch.
Type	Type of power (AC or DC).
Current Status	Displays up to indicate that your power supply functions and currently supplies power to your device. Displays down for faulty power supplies.
Utilization	Percentage of total power supply resources in use.
Voltage	Voltage of the power supply.
Product Serial Num	Product serial number of the power supply.
PCA Serial Num	PCA serial number of the power supply.

Table 3-14 Power Supply Property Window Field Descriptions (continued)

Field	Description
PCA Assembly Num	PCA assembly number of the power supply.
FRU Num	FRU number of the power supply.
Product Version ID	Version of the power supply.

Viewing Fan Status

These topics describe how to view the fan status:

Viewing Fan Summary Information

To view the status of the fans on your device, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Fans** branch.

The Fans table appears in the View frame. Table 3-15 describes the fields in the Fans table.

Table 3-15 Fan Table Field Descriptions

Field	Description
Fan ID	Numeric identifier of the fan or blower module. For more information, see the hardware installation guide for your server switch.
Current Status	Displays up if the fan functions properly; otherwise, displays down.
Speed (%)	Speed of the fan in percentage of maximum speed.

Viewing Fan Properties

To view the properties of the fans on your device, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Fans** branch.

The Fans table appears in the View frame.

Step 3 Click the radio button next to the fan whose properties you want to view.

Step 4 Click **Properties**.

The Fan Properties window opens in the View frame. Table 3-16 describes the fields in the Fan Properties table.

Table 3-16 Fan Properties Window Field Descriptions

Field	Description
Fan ID	Numeric identifier of the fan. For more detail, see the fan documentation.
Current Status	Displays up if the fan functions properly; otherwise, displays down.
Speed	Speed of the fan in the percentage of maximum speed.
Product Serial Num	Product serial number of the fan.
PCA Serial Num	PCA serial number of the fan.
PCA Assembly Num	PCA assembly number of the fan.
FRU Num	FRU number of the fan.
Product Version ID	The ID number of the version of the fan.

Viewing Temperature Sensor Status

To view the status of the power supplies on your device, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Sensors** branch.

The Sensors table appears in the View frame. Table 3-17 describes the fields in the Sensors table.

Table 3-17 Sensors Table Field Descriptions

Field	Description
Slot ID	Numeric identifier of the slot in which the temperature sensor resides. For more information on the slots in your device, see your hardware documentation.
Sensor ID	Displays the numeric identifier of the temperature sensor.
Current Status	Displays up for functional sensors and down for faulty sensors.
Operational Code (Oper Code)	Operational code of the sensor. This field displays normal, tempAlert, currAlert, or voltAlert.
Current Temp (select chassis)	Displays the curent temperature of the chassis.
Alarm Temp (select chassis)	Displays the Chassis temperature that triggers an alarm.
Shutdown Temp (select chassis)	Displays the Chassis temperature that triggers a shutdown.

Viewing the Backplane Information

To view backplane information, follow these steps:

Note This feature is not available on all hardware platforms.

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Select the **Backplane** branch.

The Backplane display appears in the View frame. Table 3-18 describes the fields in this display.

Table 3-18 Backplane Display Field Descriptions

Field	Description
Serial Number	Factory-assigned product serial number.
PCA Serial Number	Printed circuit assembly (PCA) serial number.
PCA Assembly Number	Printed circuit assembly (PCA) assembly number.
FRU Num	Field-replaceable unit (FRU) number.
Chassis ID	GUID of the chassis.
Base MAC Address	24-bit base MAC address of this chassis.
Chassis GUID	GUID of the chassis.
Product Version ID	Version of the backplane.

Viewing Management Ports on a Chassis

To view the configurations of management ports on your device, follow these steps:

Step 1 Expand **Chassis** in the Tree frame.

Step 2 Expand **Management Ports** in the Tree frame.

Step 3 Expand either the **Serial**, **Ethernet**, or **InfiniBand** branch to view the attributes of that management port. See Table 3-19, Table 3-20, and Table 3-21.

Table 3-19 describes the fields in the Serial Management Ports display.

Table 3-19 Serial Management Ports Display Field Descriptions

Field	Description
Baud Rate	Transmission speed to which you must configure your serial connection.
Data Bits	Data bits value to which you must configure your serial connection.
Stop Bits	Stop bits setting to which you must configure your serial connection.
Parity	Parity setting to which you must configure your serial connection.

Table 3-20 describes the fields in the Ethernet Management Ports display.

Table 3-20 Ethernet Management Ports Display Field Descriptions

Field	Description
MAC Address	Media access control (MAC) address of the Ethernet Management Port.
Enable Auto Negotiation	Displays true if you have enabled auto-negotiation and false if you have disabled auto-negotiation.
Administrative Port Status	Displays down if you have shut down the port and up if you brought up the port.
Current Port Status	Displays up if the port runs successfully and down if the port cannot run traffic for physical, logical, or administrative reasons.
IP Address	IP address of the Ethernet Management port.
Net Mask	Subnet mask of the Ethernet Management port.
Gateway	Default IP gateway of the Ethernet Management port.
Address Option	Configured Management Port address option.

Table 3-21 describes the fields in the InfiniBand Management Ports display.

Table 3-21 InfiniBand Management Ports Display Field Descriptions

Field	Description
Administrative Port Status	Displays down if you have shut down the port and up if you brought up the port.
Current Port Status	Displays up if the port runs successfully and down if the port cannot run traffic for physical, logical, or administrative reasons.
IP Address	IP address of the InfiniBand Management port.
Net Mask	Subnet mask of the InfiniBand Management port.
Gateway	Default IP gateway of the InfiniBand Management port.
Address Option	Address option of the InfiniBand Management port.

Table 3-21 InfiniBand Management Ports Display Field Descriptions (continued)

Field	Description
MTU	Maximum transmission unit (MTU) of the InfiniBand Management port.
PKey	Partition used by the InfiniBand Management port. See the "Setting the Partition Key for the InfiniBand Management Port" section on page 3-30.

Setting the Partition Key for the InfiniBand Management Port

In case IPoIB multicast joins are disabled on the default partition, you can change the in-band IPoIB management partition to a partition that allows IPoIB multicast joins.

To change the in-band IPoIB management partition, follow these steps:

Step 1 Expand **Chassis** in the Tree frame, and then expand **Management Ports**.

Step 2 Select **InfiniBand**.

The InfiniBand Management Ports window appears.

Step 3 In the PKey field, enter the partition key that you want to use for the in-band IPoIB partition.

Step 4 Click **Apply**.