Ethernet Icon Tasks

This chapter describes the Chasis Manager Ethernet icon tasks and contains these sections:

Viewing Bridge Groups

To view the bridge groups on your Server Switch, perform the following steps:

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

Step 2 Click the **Bridge Groups** branch. The Bridge Groups table appears in the View frame. Table 6-1 lists and describes the fields in this table.

Table 6-1 Bridge Groups Table Field Descriptions

Field	Description
ID	Bridge group ID number.
Name	Bridge group name.
Subnet Prefix	Subnet prefix of the bridge group.
Ethernet Port	Displays the trunk group and ports available that the bridge group uses to connect to the Ethernet switch.
IB Port	Displays the internal gateway slot#/port# that is associated with the bridge-group.
IB P_KEY	InfiniBand partition key of the bridge group.
Broadcast Forwarding	Broadcast forwarding configuration of the bridge group.

Viewing Bridge Group Properties

To view the properties of a bridge group, perform the following steps:

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

a. Click the **Bridge Groups** branch. The Bridge Groups table appears in the View frame.

b. Click the radio button next to the bridge group whose properties you want to view, and then click the **Properties** button. The Ethernet Chassis Manager window opens and displays the properties of the bridge group. Table 6-2 lists and describes the elements in this window.

Table 6-2 Ethernet Chassis Manager Window Element Descriptions

Element	Description
ID field	ID number of the bridge group.
Name field	Name of the bridge group.
Broadcast Forwarding field	Displays a checked box when broadcast forwarding runs.
Redundancy Group ID field	ID of the redundancy group to which the bridge group belongs.
Admin Failover Priority field	Failover priority of the bridge group.
Oper Failover Priority field	Active failover priority of the bridge group.
Broadcast Forwarding Mode field	Active broadcast forwarding mode.
IP Multicast Mode field	Active IP multicast mode.
Loop Protection Method field	Displays the loop protection method of the group.
IP Multicast field	Displays a checked box when IP multicasting runs.
Ethernet Port pulldown menu	Displays the trunk or ports that the bridge group uses to connect to the Ethernet switch.
Vlan field	Virtual LAN (VLAN) identifier of the group.
IB Port pulldown menu	Displays the IB port that the bridge group uses.
IB P_KEY field	Partition key of the bridge group.
Apply button	Applies the changes that you make in the window.
Reset button	Resets the fields in the window to match the properties of the bridge group.
Close button	Closes the window. If you close the window before you apply changes, Chassis Manager makes no changes to the bridge group.
Help button	Opens online help.

Adding Bridge Groups

To create a new bridge group, perform the following steps:

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

Step 2 Click the **Bridge Groups** branch. The Bridge Groups table appears in the View frame.

Step 3 Click the **Add** button. The Add Ethernet Bridge Group window appears.

Step 4 Enter a bridge group ID number in the ID field.

Step 5 (Optional) Enter a name in the Name field.

Step 6 (Optional) Check the **Enable** checkbox in the Broadcast Forwarding field to enable broadcast forwarding.

Step 7 Click the **none** radio button or the **one** radio button in the Loop Protection Method field to choose a protection method.

Step 8 (Optional) Check the **Enable** checkbox in the IP Multicast field to enable IP multicasting.

Step 9 Select a port from the Ethernet Port pulldown menu.

Step 10 Enter a virtual LAN in the Vlan field.

Step 11 Select an IB gateway port from the IB Port pulldown menu.

Step 12 (Optional) Enter a partition key in the IB P_KEY field.

Step 13 Click the **Apply** button.

Configuring Bridge Groups

To configure the properties of a bridge group, perform the following steps:

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

Step 2 Click the **Bridge Groups** branch. The Bridge Groups table appears in the View frame.

Step 3 Click the radio button next to the bridge group whose properties you want to view, and then click the Properties button. The Ethernet Chassis Manager window opens.

Step 4 (Optional) Enter a name for the bridge group in the Name field.

Step 5 (Optional) Enter the IP address of the next Ethernet hop of the bridge group in the Ethernet Next Hop field.

Step 6 (Optional) Enter the IP address of the next destination for packets that enter from the IB fabric in the IB Next Hop field.

Step 7 (Optional) Check (or uncheck) the **Enable** checkbox in the Broadcast Forwarding field.

Step 8 (Optional) Enter an integer value in the Redundancy Group ID field.

Step 9 (Optional) Enter an integer value in the Admin Failover Priority field.

Step 10 (Optional) Click the **none** radio button or **one** radio button in the Loop Protection Method field.

Step 11 (Optional) Check (or uncheck) the **Enable** checkbox in the IP Multicast field.

Step 12 (Optional) Select a port from the Ethernet Port pulldown menu.

Step 13 (Optional) Enter a virtual LAN ID in the Vlan field.

Step 14 (Optional) Select a gateway port from the IB Port pulldown menu.

Step 15 (Optional) Enter a partition key in the IB P_KEY field.

Step 16 Click the **Apply** button.

Deleting Bridge Groups

To delete a bridge group, perform the following steps:

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

Step 2 Click the **Bridge Groups** branch. The Bridge Groups table appears in the View frame.

Step 3 Click the radio button next to the bridge group that you want to delete, and then click the **Delete** button.

Viewing Bridge Subnets

To view bridge subnets, perform the following steps:

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

Step 2 Click the **Bridge Subnet** branch. The Bridge Subnet display appears in the View frame. Table 6-3 lists and describes the fields in this display.

Table 6-3 Bridge Subnets Field Descriptions

Field	Descriptions
ID	Subnet ID number
Subnet Prefix	Subnet prefix, in A.B.C.D format.
Subnet Prefix Len	Length of the subnet prefix.

Adding a Bridge Subnet

To add a bridge subnet, perform the following steps:

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

Step 2 Click the **Bridge Subnet** branch.

Step 3 Click the **Add** button. The Add Ethernet Bridge Group Subnet window opens.

Step 4 Enter an integer value in the ID field to assign an ID number to the subnet.

Step 5 Enter the subnet prefix in the Subnet Prefix field in A.B.C.D format.

Step 6 Enter an integer value in the Subnet Prefix Len field to configure a length for the subnet prefix.

Step 7 Click the **Apply** button.

Deleting a Bridge Subnet

To delete a bridge subnet, perform the following steps:

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

Step 2 Click the **Bridge Subnet** branch.

Step 3 Click the radio button next to the subnet that you want to delete, and then click the **Delete** button.

Viewing Bridge Forwarding

To view bridge forwarding, perform the following steps:

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

Step 2 Click the Bridge Forwarding branch. The Bridge Forwarding display appears in the View frame. Table 6-4 lists and describes the fields in this display.

Table 6-4 Bridge Forwarding Field Descriptions

Field	Description
ID	Displays the integer-value identifier of the bridge group.
Port Type	Displays eth for IP and ib for IPoIB.
Dest Address	Final destination of the packets.
Dest Length	Number of hops to the destination.
Next Hop	First hop out of the Server Switch to forward packets that you ultimately want to arrive at the destination.
Subnet Prefix	Subnet prefix of the bridge group.
Prefix Length	Subnet prefix length, in bits, of the bridge group.

Adding Bridge Forwarding

To add a bridge subnet, perform the following steps:

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

Step 2 Click the **Bridge Forwarding** branch.

Step 3 Click the **Add** button. The Add Ethernet Bridge Group Forwarding window opens.

Step 4 Enter the ID of the bridge group in the ID field.

Step 5 Click the **eth** or **ib** radio button to specify IP or IPoIB.

Step 6 Enter an IP address in the Destination Address field.

Step 7 Enter the destination length in the Dest Length field.

Step 8 Enter the IP address of the next hop in the Next Hop field.

Step 9 Inter the subnet prefix in the Subnet Prefix field.

Step 10 Enter the subnet prefix length, in bits, in the Prefix Length field.

Step 11 Click the **Apply** button.

Deleting Bridge Forwarding

To delete a bridge subnet, perform the following steps:

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

Step 2 Click the **Bridge Forwarding** branch.

Step 3 Click the radio button next to the forwarding group that you want to delete, and then click the **Delete** button.

Viewing Redundancy Groups

To view the redundancy groups on your Server Switch, perform the following steps:

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

Step 2 Click the **Redundancy Group** branch. The Redundancy Group display appears in the View menu. Table 6-5 lists and describes the fields in this display.

Table 6-5 Redundancy Group Field Descriptions

Field	Description
ID	ID number of the redundancy group.
Name	Name of the redundancy group.

Table 6-5 Redundancy Group Field Descriptions

Field	Description
Multicast PKey	Partition key of the multicast group to which the redundancy group belongs.
Load balancing	Displays enabled if load balancing runs; otherwise displays disabled.
Members	Number of members in the redundancy group.

Creating a Redundancy Group

To create a redundancy group, perform the following steps:

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

Step 2 Click the **Redundancy Group** branch.

Step 3 Click the **Add** button. An Add Ethernet Redundancy Group window opens.

Step 4 Enter an integer in the ID field.

Step 5 Enter an ASCII text name in the Name field.

Step 6 (Optional) Check the **Enable** checkbox in the Load Balancing field.

Step 7 (Optional) Check the **Enable** checkbox in the Broadcast Forwarding Mode field.

Step 8 (Optional) Check the **Enable** checkbox in the Ip Multicast Mode field.

Step 9 Click the **Apply** button.

Deleting a Redundancy Group

To delete a redundancy group, perform the following steps:

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

Step 2 Click the **Redundancy Group** branch.

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

Step 4 Click the **Delete** button.

Viewing Redundancy Group Properties

To view redundancy group properties, perform the following steps:

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

Step 2 Click the **Redundancy Group** branch.

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

Step 4 Click the Properties button. A Redundancy Group Properties window opens. Table 6-6 lists and describes the fields in this window.

Table 6-6 Redundancy Group Properties Field Descriptions

Field	Description
ID field	ID number of the redundancy group.
Name field	Name of the redundancy group.
Multicast PKey field	Partition key of the multicast group to which the redundancy group belongs.
Load Balancing field	Displays enabled if load balancing runs; otherwise displays disabled.
Members field	Number of members in the redundancy group.
Action field	Provides a pull-down menu of actions to execute with the group.
Result field	Result of the action that you apply in the Action field.
Broadcast Forwarding Mode field	Displays a checked or unchecked **Enable** checkbox.
Ip Multicast Mode field	Displays a checked or unchecked **Enable** checkbox.
Apply button	Applies the changes that you make in the window.
Reset button	Resets the fields in the window to match the properties of the bridge group.
Close button	Closes the window. If you close the window before you apply changes, Chassis Manager makes no changes to the bridge group.
Help button	Opens online help.

Viewing Trunk Groups

To view the trunk groups on your Server Switch, perform the following steps:

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

Step 2 Click the **Trunk Groups** branch. The Trunk Groups table appears in the View frame. Table 6-7 lists and describes the fields in this table.

Table 6-7 Trunk Groups Table Field Descriptions

Field	Description
ID	ID number of the trunk group.
Name	Name of the trunk group.
Port Members	Ports that belong to the trunk group.
Distribution Type	Distribution type of the trunk group. This field displays one of the following types: • srcMac Bases load distribution on the source MAC address of the incoming packet. Packets from different hosts use different ports in the channel, but packets from the same host use the same port in the trunk group. • dstMac Bases the load distribution on the destination host MAC address of the incoming packet. Packets to the same destination travel on the same port, but packets to different destinations travel on different ports in the trunk group. • srcDstMac Bases load distribution on the MAC address of the source logic gate (XOR) destination. • srcIp Bases the load distribution on the source IP address. Packets from the same source travel on the same port, but packets from different sources travel on different ports in the trunk group. • dstIp Bases the load distribution on the destination IP address of the incoming packet. Packets to the same destination travel on the same port, but packets to different destinations travel on different ports in the trunk group. • srcDstlp Bases load distribution on the IP address of the source logic gate (XOR) destination.
Trunk Group Enabled	Displays a checked **Enable** checkbox to indicate an active trunk group.
MTU	Displays the maximum transmission unit (MTU) of the group.
MAC Address	MAC address of the trunk group.
IfIndex	Interface index of the trunk group.

Adding a Trunk Group

To add a trunk group, perform the following steps:

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

Step 2 Click the **Trunk Groups** branch. The Trunk Groups table appears in the View frame.

Step 3 Click the **Add** button. The Add Ethernet Trunk Group window opens.

Step 4 Enter a trunk group ID number in the ID field.

Step 5 Enter a name for the trunk group in the Name field.

Step 6 In the Port Members field, check the checkboxes of the ports that you want to include.

Step 7 Check the checkbox of a particular card to automatically check all ports on that card.

Step 8 Click the radio button of the distribution type to apply to the trunk group in the Distribution Type field.

Step 9 (Optional) Click the **Trunk Group Enabled** checkbox to immediately enable the trunk group.

Step 10 Click the **Apply** button.

Viewing Trunk Group Properties

To view the properties of a trunk group, perform the following steps:

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

Step 2 Click the **Trunk Groups** branch. The Trunk Groups table appears in the View frame.

Step 3 Click the radio button next to the trunk group whose properties you want to view, and then click the **Properties** button. The Ethernet Trunk Group Properties window opens. Table 6-8 lists and describes the elements in this window.

Table 6-8 Ethernet Trunk Group Properties Window Element Descriptions

Element	Description
ID field	ID number of the trunk group.
Name field	Name of the trunk group.
Port Members field	Ports that belong to the trunk group.

Table 6-8 Ethernet Trunk Group Properties Window Element Descriptions (continued)

Element	Description
Distribution Type field	Distribution type of the trunk group. This field displays one of the following types: • srcMac Bases load distribution on the source MAC address of the incoming packet. Packets from different hosts use different ports in the channel, but packets from the same host use the same port in the channel. • dstMac Bases the load distribution on the destination host MAC address of the incoming packet. Packets to the same destination travel on the same port, but packets to different destinations travel on different ports in the channel. • srcDstMac Bases load distribution on the MAC address of the source logic gate (XOR) destination. • srcIp Bases the load distribution on the source IP address. Packets from the same source travel on the same port, but packets from different sources travel on different ports in the channel. • dstIp Bases the load distribution on the destination IP address of the incoming packet. Packets to the same destination travel on the same port, but packets to different destinations travel on different ports in the channel. • srcDstlp Bases load distribution on the IP address of the source logic gate (XOR) destination.
Trunk Group Enabled field	Displays a checked **Enable** checkbox to indicate an active trunk group.
MTU field	Displays the maximum transmission unit (MTU) of the group.
MAC Address field	Displays the Media Access Control (MAC) address of the trunk group, such as 00:05:ad:01:59:30. This is a unique physical address associated with the trunk (link-aggregated) interface. This address is separate from the individual port MAC addresses.
IfIndex field	Displays a management software unique identifier for all physical and logical (trunks, gateway-ports) interfaces.
Apply button	Applies the changes that you make in the window.
Reset button	Resets the fields in the window to match the properties of the trunk group.

Table 6-8 Ethernet Trunk Group Properties Window Element Descriptions (continued)

Element	Description
Close button	Closes the window. If you close the window before you apply changes, Chassis Manager makes no changes to the trunk group.
Help button	Opens online help.

Configuring a Trunk Group

To configure an existing trunk group, perform the following steps:

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

Step 2 Click the **Trunk Groups** branch. The Trunk Groups table appears in the View frame.

Step 3 Click the radio button next to the group that you want to delete, and then click the **Properties** button. The Ethernet Trunk Group Properties window opens.

Step 4 (Optional) Create or change the name of the trunk group in the Name field.

Step 5 (Optional) Check or uncheck checkboxes in the Port Members field to add or remove ports from the group.

Step 6 (Optional) Click a radio button in the Distribution Type field to change the type.

Step 7 (Optional) Check or uncheck the **Enabled** checkbox in the Trunk Group Enabled field to enable or disable the trunk group.

Step 8 Click the **Apply** button.

Deleting a Trunk Group

To delete a trunk group, perform the following steps:

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

Step 2 Click the **Trunk Groups** branch. The Trunk Groups table appears in the View frame.

Step 3 Click the radio button next to the group that you want to delete, and then click the **Delete** button.