20 Configuring CBF Interface Connections

This chapter provides the procedures for creating connection-based forwarding (CBF) interface connections. These connections support both SMDS and bridged IP interfaces.

Overview

CBF connections forward frames along connections configured between pairs of interfaces. Frames received on a connection's ingress interface are forwarded directly to that connection's egress interface. The packet is transmitted from ingress to egress forwarding interfaces as the raw layer 2 payload received from the layer 2 interface. Both the ingress and egress interfaces are SMDS-encapsulated or bridged-IP encapsulated and have CBF interfaces associated with them. Once the connection between the ingress and egress interfaces is made, traffic begins to flow.

References

See the following related chapters for additional information:

- *Chapter 19, Configuring CBF Interfaces*
- *Chapter 27, Configuring SMDS Interfaces*

- *NMC-RX User Guide, Vol. 2, Chapter 9, Configuring IP Tunnel Interfaces*
- *NMC-RX User Guide, Vol. 2, Chapter 10, Configuring Tunnel Connections*

Creating CBF Connections

You can establish a CBF connection between two CBF interfaces. See *Chapter 19, Configuring CBF Interfaces*

You can establish a CBF connection between two bridged IP interfaces. See *Chapter 18, Configuring Bridged IP*.

When you configure SMDS, you set up a CBF connection that connects the two CBF interfaces. See Figure 20-1.

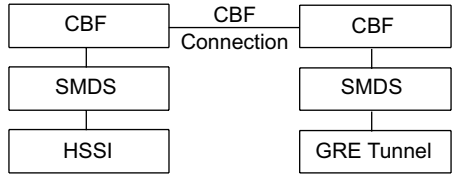


Figure 20-1 CBF connection between CBF/SMDS interfaces

You can also establish a CBF connection between two bridged IP interfaces. See Figure 20-2.

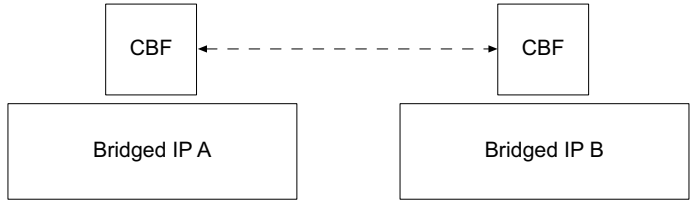


Figure 20-2 CBF connection between bridged IP interfaces

Creating CBF Interface Connections

You can create a CBF interface connection either through the SMDS Tunnel Connection dialog box or by executing either an Associate Tunnel Interface action or an Associate HSSI Interface action.

The following procedure illustrates the creation of a CBF interface connection by executing an Associate HSSI Interface action:

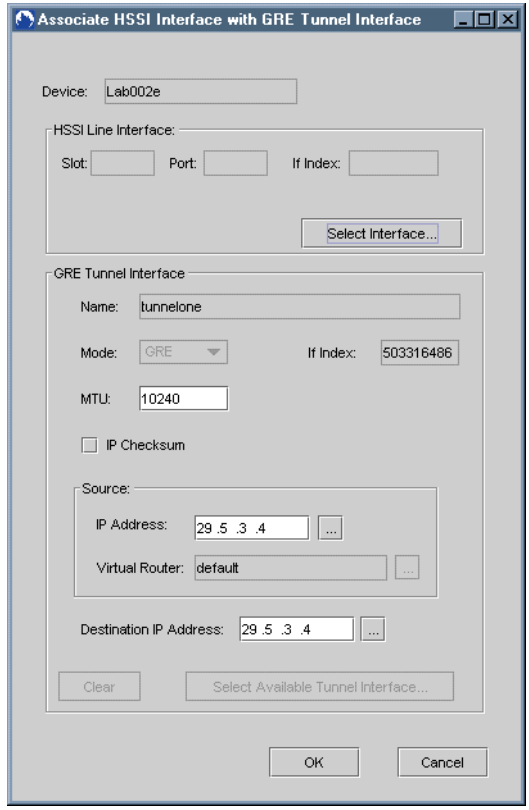
1 In the Device-wide Explorer, select IP Tunnel, right-click, and click List All.

The list of IP tunnel interfaces appears in the list area.

2 Click the appropriate IP tunnel interface.

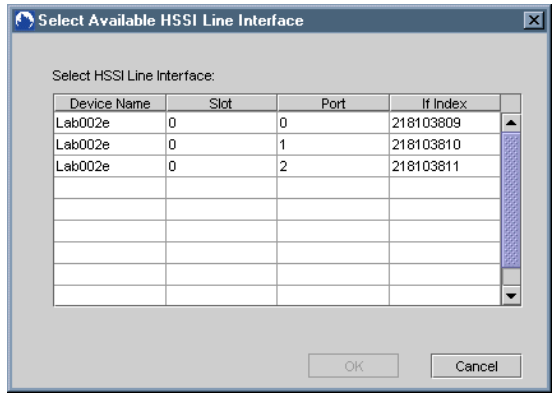
3 Right-click, and click Associate HSSI Interface.

The Associate HSSI Interface with GRE Tunnel Interface dialog box appears.



4 To select the HSSI line interface, click Select Interface.

The Select Available HSSI Line Interface dialog box appears.



5 Select the line interface you want, and click OK.

The line interface's slot and port numbers appear in the HSSI Line Interface group box in the Associate HSSI Interface with GRE Tunnel Interface dialog box.

6 Set the editable parameters for the GRE tunnel interface. See Table 20-1.

Table 20-1 GRE tunnel parameters

Parameter	Description
MTU	Maximum transmission unit; range: 1024–10240; default: 10240. To function effectively, the MTU value must be the same for both endpoints.
Source: IP Address	Source IP address for the tunnel interface
Destination IP Address	Destination IP address for the tunnel interface

Note: *You can set the IP address parameters either by typing the address in the text fields or by clicking the buttons and selecting the addresses from the related dialog box that appears.*

7 Click OK.

The CBF interface connection is created.