

Chapter 29

Configuring SMDS Interfaces

This chapter describes how to configure Switched Multimegabit Data Service (SMDS) on the following interfaces:

- HSSI line interfaces
- IP tunnel interfaces

SMDS interfaces are created automatically when you create an SMDS tunnel connection. However, you can also create SMDS interfaces individually.

This chapter contains the following sections:

- Overview on page 295
- References on page 296
- Creating an SMDS Interface on a HSSI Line Interface on page 296
- Creating an SMDS Interface on an IP Tunnel Interface on page 297

Overview

The SMDS trunk interface supports SMDS framed in standard High-Level Data Link Control (HDLC). This interface is like other layer 2 interfaces, such as PPP, Frame Relay, and ATM, with the exception that the system does not de-encapsulate the packet and route the traffic as it does for the other layer 2 interfaces.

A HSSI physical interface maps one-to-one with an SMDS logical interface. The data received on an SMDS interface is forwarded to the destination interface in the E-series device, which has an associated generic routing encapsulation (GRE) tunnel interface defined. If a (connection-based forwarding) CBF interface does not exist for the SMDS interface, all received traffic is dropped. In addition, the connection must be to another HSSI or to a GRE tunneled interface and never to a purely routed interface.

The SMDS trunk interface supports only CBF to another SMDS trunk-encapsulated interface; that is, to a GRE tunnel.

References

For more information, see the following related chapters:

- *Chapter 21, Configuring CBF Interfaces*
- *Chapter 22, Configuring CBF Interface Connections*
- *NMC-RX User Guide, Vol. 2, Chapter 9, Configuring IP Tunnel Interfaces*
- *NMC-RX User Guide, Vol. 2, Chapter 10, Configuring Tunnel Connections*

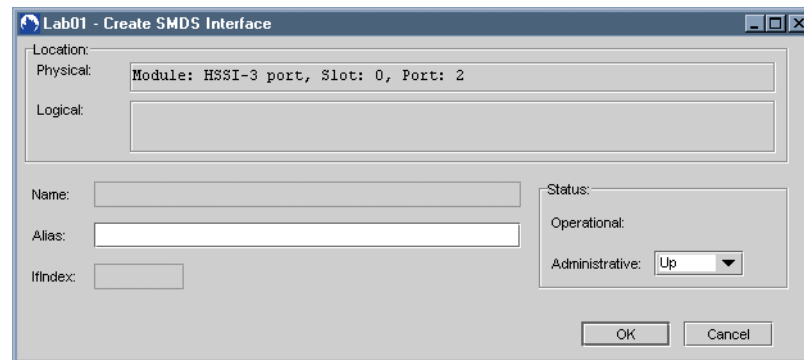
Creating an SMDS Interface on a HSSI Line Interface

You can create SMDS interfaces on a HSSI line interface.

To create an individual SMDS interface:

1. Open the HSSI module folder.
2. Select the HSSI line interface on which you want to create the SMDS interface.
3. Right-click, select Create, and click SMDS interface.

The Create SMDS Interface dialog box appears.



4. Set the SMDS interface parameters described in Table 90.

Table 90: SMDS Interface Parameters

Parameter	Description
Name	Identifies the interface; generated automatically
Alias	Description of the interface; 0–15 characters; default: blank
IfIndex	Identifies the interface on the particular line interface; generated automatically
Operational	Current operational status of the interface
Administrative	Desired status of the interface: Up/Down; default: Up

- Click OK.

The Creation complete dialog box appears.



- Click OK.

Creating an SMDS Interface on an IP Tunnel Interface

You can create SMDS interfaces on IP tunnel interfaces.

To create an individual SMDS interface:

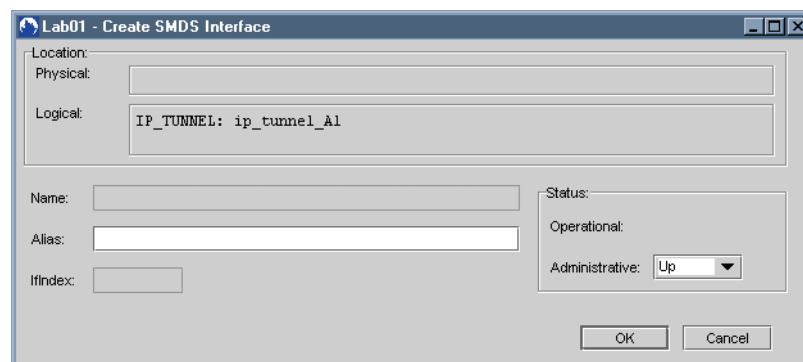
- In the Instance Explorer or the Device-wide Explorer, click System.
- Right-click, select List All, and click IP Tunnel Interfaces.

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

Slot	Tunnel Interface Name	IF Index	Source	Mode	Device Name
N/A	ip_tunnel_interf_01	503316482	172.31.1.8	GRE	Lab001e

- Select an IP tunnel interface, right-click, select Create, and click SMDS Interface.

The Create SMDS Interface dialog box appears.



See the SMDS interface parameters as described in Table 90.

- Click OK.

