Command Line Interface Overview

This chapter describes the command line interface (CLI) for the SES PNNI controller. For information on how to configure a switch and basic network services, refer to the *Cisco SES PNNI Controller Software Configuration Guide, Release 3.0*.

Contents of this chapter include:

- Role of the Command Line Interface
- Command Line Interface Prompt
- Command Syntax
- Contents of a Command Description

Role of the Command Line Interface

The tools for configuring, monitoring, and controlling a switch are the CiscoView application for equipment management and the Cisco WAN Manager (CWM) application for connection management. However, during initial switch installation, or where low-level control is important, the CLI provides the best access to the switch.

To move from the CLI of one card to the CLI of another card, use the **cc** command. For more information on the **cc** command, see Chapter 3, "Alphabetical Listing of SES PNNI Controller Commands."

Access Level

The available command set depends on the privilege level of the user.

The following access levels are shown in descending order:

```
CISCO_GP (engineering debug)
SERVICE_GP (strategic partner)
SUPER_GP (network manager)
GROUP1 (highest technician level)
GROUP2
GROUP3
GROUP4
GROUP5 (lowest technician level)
ANYUSER (anyuser)
NOUSER_GP
```

Command Line Interface Prompt

The following format is for the CLI prompt:

name.slot number.card type.card state>

The following definitions are for each parameter:

name	Specifies the name of the node. **Note** The name is unknown until you assign a name by using the **cnfname** command.
slot number	Specifies the slot of the front card.
card type	Identifies the Processor Switching Module 1 (PXM1) or type of service module.
card state	Defines the following states: • "a" is for active. A card in the active (a) state is fully configured and ready to carry out its function or is already performing its functions in live traffic. • "s" is for standby. Typically, a card goes into the standby (s) state when it first powers up and boots or when you execute a command that puts it in the standby state.

The following is an example of the CLI prompt:

```
SES_SJ.1.PXM.a >
```

where:

• Name of the node is SES_SJ.

• Slot number is 1.

• Card type is PXM1.

• Card state is active.

Command Syntax

This section contains the following syntax areas:

• Notation

• Command Entry

• Port Identifier

The SES PNNI controller command syntax complies with the syntax defined by the Cisco MGX 8800. The syntax supported is as follows:

```
Command :== CMD_STRARG | CMD_VWARG | CMD_CALLXSTURCT | CMD_CALLXPSTRUCT
CMD_STRARG :== command-name <value1> <value2> ... <valueN>
CMD_VWARG :== command-name <value1> <value2> ... <valueN>
CMD_CALLXSTRUCT :== command-name <value1> <value2> ... [<valueN>]
CMD_CALLXPSTRUCT :== command-name <value1> <value2> ... [<valueM>]
-key1 <value1> [-key2 <value2>] ... [-keyN <valueN>]

Description:
1) CMD_STRARG is the command in which all arguments are passed as char
```

```
strings.
2) CMD_VWARG is for calling VxWorks style routine.
3) In CMD_CALLXSTRUCT, the sequence of parameters are fixed, i.e.
position dependent.
4) In CMD_CALLXPSTRUCT, it contains a list of fixed parameters that are
position dependent and a list of keyword parameters that are
position independent.
```

Notation

The following notations are used for the command and argument parameters:

- Commands and their parameters are separated by a space.

- Variables appear in *italics*.

- Keywords and commands appear in **bold**.

- Required arguments appear within left and right arrowheads ("< >").

- Optional parameters appear within square brackets ("[ ]").

- A vertical bar (|) represents the logical OR function.

Command Entry

When you enter a command with the current version of the product, you must type all intended arguments before you press the **Return** key or **Enter** key.

If you press either the **Return** key or **Enter** key with incorrect parameters or no parameters (if the command requires parameters), a message displays the syntax and parameter ranges. The returned message can also indicate the type of problem. For example, the message can warn of too few parameters.

Note   No error messages or warnings appear until you complete the command.

Port Identifier

The following format is used in the CLI to identify ports:

[*shelf.*]*slot*[:*subslot*].*port*[:*subport*]

This is a generic port identifier, which is independent of specific platform. The interpretation of the identifier depends on the platform. For instance, the optional **subslot** field is used to identify the back card for AXSM, and the same field is not used for the BXM cards. The optional **subport** is used to identify a VP tunneling interface in both of the cards aforementioned.

In this chapter, <portid> stands for the string "[*shelf.*]*slot*[:*subslot*].*port*[:*subport*]."

Any reference to the PNNI port or <portid> refers to the PNNI partition on the switch and not the Physical port itself. Any operation on <portid> affects only the PNNI partition associated with it on the switch.

Contents of a Command Description

Each command description contains the following:

- Introductory paragraph that explains the function of the command.

- List of cards on the CLI where you can execute the command.

- Syntax of the command.

- Syntax description that lists all the parameters. Each parameter in the list includes the following:

    - Brief definition.

    - Functional details if applicable.

    - The range of values for the parameter.

    - An applicable default value.

> **Note**   For many instances, the default value is not merely a basic starting value but rather the most desirable or commonly used value.

- "Related Commands" section lists other commands in the typical groups, for example, add, delete, configure, and display, or other commands that can complement the command.

- "Attributes" section lists the following details:

    - The access level contains the privilege level for the user.

    - The state of the card that is required to execute a command. The state can be active, standby, or initialize.

    - The switch logs each instance for a command execution. Typically, the switch logs each configuration change but no display commands.

- "Example" section that illustrates one or more examples of command usage. The text for the Example section describes the intention of the command and can also describe an outcome.