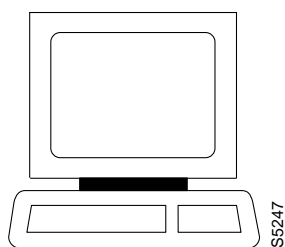# Basic Commands

The *user interface* commands provide access to an IPX, IGX, or BPX system through the control terminal. These commands give help on command usage, display the 12 most recent commands entered into the system, connect to another node, and sign-off. These commands also give a means to clear, print, or redraw the screen. These commands are all simple to use and have no command parameters except the virtual terminal command (**vt**), in which the node name must be specified, and the help commands, in which a command character string must be entered.

Getting Help

Entering **help** or **?** displays command information. The **help** command can provide access to a general help menu or to information on a specific command. To access the general help menu, enter either **help** or **?**. Either of these commands displays the command category menu on the screen and prompts for a selection. Use the arrow keys to move the cursor to the correct category then press the Return key.

For information on a specific command, enter **help** or **?** followed by a command name. For example, enter the following for information on adding a trunk:

    help addtrk

Press Return to display the information. Entering **help** or **?** followed by a character string displays all those commands containing the character string. For example, enter the following for a list of all commands that contain the string "fr":

    ? fr

Signing On

Signing on to the system is a two-step process requiring the entry of both a User ID and a password. The system administrator can provide a User ID and password for the network. Only the system administrator can assign and change User IDs. Once a password is assigned, a user can change his or her own password. For security reasons, periodically change the password.

When the following prompt appears at the bottom of the initial screen, the system is ready for user-login:

Enter User ID:

Entering a User ID and password gives access at a particular level of user-privilege. (Each command has one or more levels of associated user privilege.) For information on access privileges and passwords, refer to Chapter 15, "Managing the Network." User IDs can have up to 12 characters. At the prompt, enter the User ID. The system responds with the following prompt:

Enter Password:

For initial sign-on, enter the password. The password does not appear on the screen. Upon correct User ID and password entry, the log-in is recorded by the event log, and the screen displays the following prompt:

Next Command:

The system is ready for command entry.

Logging Out

To log out, enter the **bye** command. When the terminal connection is local, this returns the display to the initial screen. To log out completely from a remote (virtual terminal) session, enter **bye** twice.

Clearing and Redrawing the Screen

Use the Clear Terminal Screen (**clrscrn**) to clear the screen. Use the Redraw Terminal Screen (**redscrn**) command to clear and redraw the screen. The **clrscrn** command clears any information displayed in the top portion of the screen. This information could consist of status displays on lines and connections or Help text. To clear the screen, enter **clrscrn**.

The **redscrn** command redraws the screen and updates the status lines. To make sure the status lines have been updated, enter the **redscrn** command. For example, to redraw a screen's display with the latest statistics before printing the screen, enter **redscrn**.

Printing Screens

The Print Terminal Screen (**prtscrn**) command prints the current screen display. Verify that the node printer is correctly configured before attempting to print a screen. Upon **prtscrn** entry, the screen display goes to either a local or remote printer. To print all the information in a screen, enter **prtscrn**.

Accessing Physically Remote Nodes

The Make Virtual Terminal Connection (**vt**) command establishes a virtual terminal connections to a remote node. Once the connection is established, command entry and execution takes place as if the terminal were the local terminal on the remote node. The **vt** command lets network configuration take place from a central site. The only command that cannot run remotely is the **vt** command itself.

The privilege of user commands available through a **vt** connection is the same as that of the user who logged into a node with **vt**. To establish a virtual terminal connection with a remote node, enter **vt** and the name of the node name. For example, to **vt** to node "alpha," enter:

vt alpha

The words Virtual Terminal appear on the screen at the lower left corner to signal the presence of a virtual terminal connection. The remote node name appears at the upper left corner of the screen. To terminate the virtual terminal connection and return to local terminal connection, enter the **bye** command.

The **bye** command has two separate functions:

- If the terminal connection is local, **bye** logs the user out of the system.

- If the connection is remote (a vt connection), the **bye** command breaks the remote connection and returns the terminal to local connectivity.

To log out of the system during a remote (vt) session, enter the **bye** command twice. Note that after a default period of four minutes of inactivity, the vt session automatically ends, and the connection reverts back to being local. The timeout is configurable.

If the multiple **vt** feature has been purchased, multiple users can log into a node with the **vt** command. Cisco WAN Switching personnel must activate this purchased feature.

List of Basic Commands

The following table lists the commands discussed in the previous sections. Definitions for these commands take up the rest of this chapter.

Table 3-1   List of Basic Commands

Mnemonic	Description	Page
.	Display command history	3-4
help or **?**	Help	3-6
bye	End user session	3-9
clrscrn	Clear screen	3-11
prtscrn	Print screen	3-12
redscrn	Redraw screen	3-13
vt	Make virtual terminal connection	3-14

. (a period)

Displays the 12 most recently used commands. To re-use one of these commands, enter the associated number. The command appears on the command entry line, ready for editing or re-execution. Editing in this case means back-spacing through the command's arguments and typing in a new value or backspacing without typing a new value to restart the command at the cursor position.

Full Name

Display command history

Syntax

.

Related Commands

None

Attributes

Privilege	1–6
Jobs	No
Log	No
Node	IPX, IGX, and BPX
Lock	No

Example 1

.

Description

Display a command history.

System Response

```
gamma          TRM   YourID:1       IPX 16   8.2   Mar. 15 1996 13:47 CST

Command history

12: dspcons
11: vt beta
10: dspcons
9: addcon 6.4 alpha 6.4 (.6
8: addcon 8.1.200 alpha 9.1.300 1
7: upfrport 8.1.200
6: dntrk 14
5: uptrk addjob
4: addjob
3: dspjobs
2: addjob
1: dspjobs


Last Command: .


Next Command:
```

help or ?

Displays a help menu. This command accesses the help routine in the system software. It provides:

- A short description of the command

- An indication of whether the command can be used in a job

- The command syntax

A more extensive, menu-driven, on-line help function exists within the StrataView Plus NMS. Consult the *StrataView Plus User's Guide* for a complete description of the on-line help.

The ways to request help on commands are:

- Entering "help" or "?" without an argument lists the command categories. Selecting one of these categories (using arrow keys and Return) displays all the commands in that category. Commands in this list are selectable by using arrow keys then the Return key.

- Entering a command name displays help for that particular command.

- Entering a partial command name lists all commands that contain that character string. For example, "fr" indicates all commands (such as **cnffrport**) that contain "fr." Commands in this list are selectable by using arrow keys then the Return key.

Full Name

Help command

Syntax

?   [command name | character string

help   [command name | character string]

Related Commands

None

Attributes

Privilege   1–6

Jobs   No

Log   No

Node   IPX, IGX, and BPX

Lock   No

Example 1Description

help

Display the help menu.

System Response

```
gamma          TRM   YourID:1        IPX 16   8.1.B0   Mar. 15 1994 13:47 CST

All commands fall into one (or more) of the following categories:

Control Terminal
Configuration
Lines
Network
Connections
Cards
Alarms and Failures




This Command: help


Use cursor keys to select category and then hit <RETURN> key:
```

Example 2 Description

help cnflan

Display syntax information on how to enter a specific command.

System Response

```
beta           TRM   YourID:1        IPX 32   8.1.B0   Mar. 15 1994 14:42 MST

cnflan          - Configure LAN Interface
Cannot be included in Jobs.
Usage: cnflan <IPAddr> <IPSubnetMask> <TCPServicePort> <GatewayIPAddr>








Last Command: help cnflan


Next Command:
```

Example 3 Description

help fr

Display all commands that have "fr" in their name (all the frame relay commands). A list of all commands containing the letters "fr" appears on screen. Scroll to a command then press Return to display the related help screen.

Parameter

Description

command

Specifies a command.

string

Specifies a character string for a search argument.

bye

Ends a local or remote terminal connection. With a local terminal connection, the **bye** command logs out the user. If a local terminal is inactive for a (default) period of 20 minutes, the connection is automatically broken. This is the equivalent of entering the **bye** command. With a remote terminal connection (**vt**), the **bye** command returns the terminal to the local node. After a (default) period of 4 minutes of inactivity, a remote terminal connection is automatically returned to a local connection. This is equivalent to entering the **bye** command.

Full Name

End user session

Syntax

bye

Related Commands

vt

Attributes

Privilege	1–6
Jobs	Yes
Log	No
Node	IPX, IGX, and BPX
Lock	No

Example 1

bye

Description

End a current session from a local node. The local connection ends, and the initial sign-on prompt appears on the screen.

System Response

```
gamma          TRM   YourID:1       IPX 16   8.2      Mar. 15 1996 13:47 CST
```

```
Enter User ID:
```

clrscrn

Clears the terminal screen.

Full Name

Clear terminal screen

Syntax

clrscrn

Related Commands

redscrn, prtscrn

Attributes

Privilege   1–6

Jobs   Yes

Log   No

Node   IPX, IGX, and BPX

Lock   No

Example 1 Description

clrscrn

Clear the screen.

System Response

```
 pubsipx1        TN    SuperUser    IPX 16    8.2    July 15 1996 22:49 GMT
```

```
    Last Command: clrscrn


    Next Command:
```

prtscrn

Prints the information on the screen at the time the command is entered.

Full Name
Print terminal screen

Syntax
prtscrn

Related Commands
clrscrn, redscrn

Attributes

Privilege	1–6
Jobs	Yes
Log	No
Node	IPX, IGX, and BPX
Lock	Yes

Example 1 Description
prtscrn

Print the information on the screen at the time the command is entered.

System Response
All information on the terminal screen is printed. If printing is successful, no status message appears.
If the printer is unavailable, an appropriate status message appears.

redscrn

Redraws the screen. This command can be useful for communication that involves a modem. If data has become corrupted and caused erroneous characters on the terminal screen, **redscrn** clears them.

Full Name

Redraw the terminal screen

Syntax

redscrn

Related Commands

clrscrn, prtscrn

Attributes

Privilege	1–6
Jobs	Yes
Log	No
Node	IPX, IGX, and BPX
Lock	No

Example 1 Description

redscrn

Clear the terminal screen and redraw the valid screen information.

System Response

The current screen reappears without erroneous characters.

vt

Establishes a virtual terminal connection to a remote node. A **vt** connection has the following properties:

- On the remote node, any command except the **vt** command can be executed.

- Multiple **vt** sessions is a purchasable option. With it, more than one user can **vt** to a node.

- During a virtual terminal session, jobs can be executed at any time.

During a **vt** session, the remote node name and date flash on the local terminal screen, and "Virtual Terminal" appears in the lower left corner. The **bye** command terminates a virtual terminal session and returns the terminal to local usage. After a default timeout of four minutes of inactivity, a **vt** connection automatically reverts to a local connection. This timeout is the equivalent of using the **bye** command.

Full Name
Make a virtual connection

Syntax
vt <nodename>

Related Commands
bye

Attributes

Privilege   1–6

Jobs   Yes

Log   No

Node   IPX, IGX, and BPX

Lock   No

Example 1 Description
vt sw115

Establish a virtual terminal connection to the switch named "sw115."

System Response

```
sw115          VT    SuperUser      BPX 15    8.2      July 15 1996 16:59 PDT
```

```
Last Command:

Next Command:

Virtual Terminal     CD
```

Parameter
node name

Description
Specifies the name of the remote node for the virtual terminal connection. If the specified node name is not valid, the returned message states that the "Node is unknown" and prompts for the correct node name. Also, the main area of the screen names the recognized nodes in the network to help determine the correct name.