About This Manual

This section discusses the objectives, audience, organization, and conventions of the *LightStream 2020 NP O/S Reference Manual*. It also lists related Cisco documentation for the LightStream 2020 (LS2020).

Cisco documentation and additional literature are available on a CD called Cisco Connection Documentation, Enterprise Series. The CD is updated and shipped monthly, so it might be more current than printed documentation. To order the Cisco Connection Documentation, Enterprise Series CD, contact your local sales representative or call Customer Service. The CD is available by itself (as a single CD) and through an annual subscription. You can also access Cisco technical documentation on the World Wide Web, using URL http://www.cisco.com.

Note The Cisco Connection Documentation, Enterprise Series CD was previously called UniverCD.

Document Objectives

LS2020 node software runs under LynxOS, a real-time UNIX operating system. This manual contains UNIX manual "pages" for LynxOS commands, system utilities, and the GNU bash shell. It also provides a user's guide for the vi text editor.

All Cisco technical documentation and additional literature are available on Cisco Connection Documentation CD-ROM, Cisco's online library of product information. The Cisco CD is updated and shipped monthly, so it might be more up to date than printed documentation. The Cisco CD is available both as a single CD and through an annual subscription. To order the Cisco CD, contact your local sales representative or call Customer Service. You can also access Cisco technical documentation on the World Wide Web using URL http://www.cisco.com.

Audience

The *LightStream 2020 NP O/S Reference Manual* is an operating-system software reference manual. It is intended for system administrators responsible for nodes in an LS2020 network and for anyone who operates an LS2020 network.

Users of the LS2020 document set are expected to have a general understanding of basic data communications concepts and some practical knowledge of the UNIX operating system.

Organization

The following list shows the organization of this manual.

- Chapter 1, "NP O/S Command Reference," provides manual pages for some of the most frequently used LynxOS commands and system utilities.

- Chapter 2, **"**GNU Bash Shell Reference," provides the manual page for the GNU Bourne-Again Shell (bash), the user interface to LynxOS commands on the LS2020 node.

- Chapter 3, "Vi Editor User's Guide," Describes how to use the vi text editor.

- Appendix A, "Special Files," describes some files that are used by LS2020 software, and lists some standard UNIX operating system files.

Text Conventions

The following conventions distinguish different types of text:

- Commands and keywords are in **boldface**.

- In interactive examples, user input is in **boldface**.

- In command syntax statements:

  — Parameters (variables for which a specific value is to be typed) are in *italics*.

  — Optional arguments are in square braces.

  — Alternative arguments are separated by vertical bars, and are grouped within curly braces.

- Names of keys on the keyboard are in square braces, for example, the [Tab] key.

- Control keys are indicated by a caret preceding a letter: ^A means Control-A.

The bash prompt has the following format for the root login:

> *nodename***:***slot***#**

The bash prompt has the following format for all other logins:

> *nodename***:***slot***$**

In this prompt format, *nodename* is the name of the node and *slot* is the slot number (1 or 2) of the active NP. In examples in this book, LSnode is used as the value of *nodename*, and 2 is used as the value of *slot*, as follows for the two types of prompts:

```
LSnode:2#
LSnode:2$
```

Note Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the manual.

Caution Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

Related LS2020 Documentation

The following is a list of LS2020 manuals and other material relevant to LS2020 switch users.

- *LightStream 2020 System Overview*

  Introduces the LS2020 switch and the Asynchronous Transfer Mode (ATM) technology on which the LS2020 product is based. It describes traffic flow through an LS2020 network and presents key features, such as traffic and network management.

- *LightStream 2020 Site Planning and Cabling Guide*

  Provides guidelines you can use as you prepare your site to receive LS2020 hardware. It includes space, environmental, and electrical requirements; rack selection guidelines; requirements for the management workstation; and information on cables and connectors.

- *LightStream 2020 Installation Guide*

  Tells you how to install and set up LS2020 nodes and how to install StreamView management software on your network management workstation.

- *LightStream 2020 Hardware Reference & Troubleshooting Guide*

  Describes LS2020 hardware components and tells you how to troubleshoot and diagnose component problems. It also give procedures for configuring and replacing individual components.

- *LightStream 2020 Configuration Guide*

  Provides the information you need to configure LS2020 switches. It describes the configuration tools and the procedures for using them, introduces the configuration database, and defines all configurable attributes and their settings. The guide also provides step-by-step configuration procedures.

- *LightStream 2020 Network Operations Guide*

  Presents an overview of network tasks. It introduces the command line interface (CLI) and the graphical user interface (GUI), and it describes GUI-based monitoring procedures. The manual also describes facilities for viewing statistics and collecting traffic data.

- *LightStream 2020 CLI Reference Manual*

  Presents the syntax and functions of all CLI commands, describes the LS2020 private MIB, and discusses test and control system (TCS) hub commands.

- *LightStream 2020 Command Line Interface (CLI) Reference Card*

  Compactly summarizes the syntax and arguments for all CLI commands.

- *LightStream 2020 Traps Reference Manual*

  Discusses LS2020 traps and outlines the procedures used to determine whether traps will be logged and where they will be viewed. The manual also describes the major SNMP, operational, and informational traps.

- *LightStream 2020 NP O/S Reference Manual*

  Discusses the most frequently used LynxOS commands and the bash shell. It also provides a tutorial and reference guide for the vi editor.

- LightStream 2020 upgrade procedures and release notes

  Upgrade procedures outline steps involved in upgrading software. Release notes describe new features and special considerations (including known software bugs). Release notes and upgrade procedures are provided for both the platform software and the network management software.

Note   The upgrade procedures and release notes include important information that was not available when the other documents were printed.

- *Internetworking Terms and Acronyms*

  Presents information on internetworking terms and acronyms, including material of interest to users of the LS2020 switch.

- *LightStream 2020 Online Help*

  The LS2020 CLI and GUI network management tools support online help facilities.

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