About This Manual

Document Objectives

This document has two objectives:

- To help you prepare your site for the delivery and installation of a LightStream 2020 multiservice ATM switch (LS2020 switch)

- To assist you in making the LS2020 switch fully operational in your networking environment

This document guides you through the following major tasks:

- Ensuring that your site conforms to applicable standards and environmental requirements

- Installing the LS2020 switch in the selected location

- Performing basic configuration procedures for the LS2020 StreamView network management software that runs on your Sun network management system (NMS)

- Installing the LS2020 StreamView network management software to make it operable on the NMS either in the presence or absence of HP OpenView on the NMS

- Installing additional components in your LS2020 switch after system delivery

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

Audience

The audience for this guide includes LS2020 customers, Cisco Systems, Inc. employees, and partner companies who need information about installing LS2020 nodes in a network.

For brevity and clarity, the LightStream 2020 multiservice ATM switch may be referred to generically throughout this document using one of the following terms:

- LS2020 switch

- LS2020 chassis

- LS2020 node

Context will determine which one of these terms is appropriate to the discussion at hand.

Document Organization

This manual is organized as follows:

- "About This Manual" describes the document's objectives, audience, and organization. Also, this section presents the document conventions used in this manual and identifies related documents that, as a whole, constitute the user information library for an LS2020 switch.

- The "Overview" chapter summarizes the primary tasks involved in installing the hardware and software for an LS2020 switch. It also establishes an appropriate context for discussing the platform (chassis) software and the StreamView (network management) software, both of which are essential in making an LS2020 switch fully functional in a networking environment.

- The "Installing a LightStream 2020 Switch" chapter explains how to rack mount an LS2020 chassis, mount fantails, attach cables, apply power, and enter basic configuration information for the StreamView network management software running on the NMS.

- The "Installing StreamView Software" chapter explains how to install the StreamView network management software on your NMS so that it can run either with or without HP OpenView.

- The "LightStream 2020 Setup Procedures" chapter provides instructions for a variety of tasks that you should perform before activating your LS2020 switch in the network.

  The set-up procedures in this chapter relate to the platform software that runs on the network processor (NP) card in the LS2020 chassis.

  The NP card operates in conjunction with a floppy disk drive (for loading software) and a hard disk drive (for storing software and configuration data). Together, these elements serve as the loading, computational, and storage resources for an LS2020 switch.

  An LS2020 switch can accommodate a second NP card. If present, the second card serves as a backup to the first. Each NP card also has an associated access card that provides an Ethernet port for connectivity within the networking environment.

- The "Installing Additional Components" chapter provides directions for the on-site installation of additional functional components in your LS2020 chassis after initial system delivery and installation.

  For example, an LS2020 switch can accommodate the following additional components:

  — A second NP card. If present, the second card serves as a backup to the first card.

  — An additional switch card

  — An additional AC or DC power tray

  — Additional line cards for supporting a variety of networking technologies and interfaces

- The "StreamView Output Samples" appendix provides representative output generated by StreamView software modules during various installation and software configuration tasks.

Document Conventions

The conventions listed in the table below are used in this document to enhance reader comprehension and product usability.

Convention	Purpose	Example
Bold screen literal type	Represents user input.	$ **date**
Screen literal type	Represents system output.	Wed May 6 17:01:03 EDT 1994
Boldface type	Denotes names of commands, command arguments, and switches. Command names are case sensitive; enter them exactly as they appear in the text or examples.	Issue the **clear** command.
Italic type	Used for titles of documents and for emphasis.	*LightStream 2020 Configuration Guide*. File names are *case* sensitive.
Angle brackets <>	Indicate user-specified parameters or classes of user responses. When you see this notation in command syntax, make the substitution enclosed within the brackets, but do not type the angle brackets.	If you see: **set port** <c.p> <state> you might type: **set port 4.3 active**
Square brackets [ ]	Indicate optional arguments or parameters for commands. You can omit optional arguments and parameters in any command.	cli> **help** [<topic>]
Caret symbol ^	When the caret symbol precedes a character, it refers to the control key.	^X (the same as Control X)
Curly braces{ }	Indicate a choice of argument or parameters for commands. Arguments or parameters are separated by a vertical line{|}, and you must select *one*.	cli> **set cli traplevel** **{off|info|oper|trace|debug}**

Related Cisco Documentation

Other documents describing various usage aspects of the LS2020 switch are listed below. Cisco Systems recommends that you have these documents at hand, since they form an integrated library of LS2020 usage information. Wherever appropriate, each document references other companion manuals that contain related or more detailed information on a given topic.

- *LightStream 2020 System Overview*

  Describes the LS2020 switch and how it works. It outlines basic asynchronous transfer mode (ATM) technology and describes LS2020 hardware and software.

- *LightStream 2020 Site Planning and Cabling Guide*

  Describes how to prepare your site to receive LS2020 hardware. It includes space, environmental, electrical, and network management workstation requirements, as well as rack-selection guidelines and information regarding LS2020 cables and connectors.

- *LightStream 2020 Configuration Guide*

  Provides the information you need to configure LS2020 switches for operation. It describes the configuration tools and tells you how to use them. It also describes the configuration database and the configurable LS2020 attributes and operational settings. Finally, the guide provides step-by-step procedures for configuring a Light-Stream 2020 switch.

- *LightStream 2020 Network Operations Guide*

  Describes how to operate a network of LS2020 switches. It presents an overview of network tasks, describes the command line interface (CLI), and presents procedures for displaying the status of nodes, cards, and ports. It also describes facilities for viewing statistics and collecting traffic data.

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

  Provides detailed descriptions of the syntax and functions of all command line interface (CLI) commands. It also describes the private management information base (MIB) for the LS2020 switch.

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

  Summarizes the syntax and arguments of all CLI commands in a compact and easy-to-use form.

- *LightStream 2020 Hardware Reference & Troubleshooting Guide*

  Provides a detailed description of LS2020 hardware. It also tells you how to diagnose hardware problems and how to replace faulty hardware components.

- *LightStream 2020 Traps Reference Manual*

  Provides an overview of LS2020 traps (error and event messages), as well as a list of operational, SNMP, and informational traps generated by the LS2020 switch.

- *LightStream 2020 NP O/S Reference Manual*

  Provides detailed descriptions of the most frequently used LynxOS commands. It also describes the bash shell and provides a tutorial introduction and reference guide to the vi editor.

- *LightStream 2020 Release Notes*

  Provides a software upgrade procedure and describes new LS2020 features and release-specific functional and operational considerations, including information on known software bugs.

Note   The *LightStream 2020 Release Notes* contain important, late-developing information that may not appear in the LS2020 document set at the time of product release. You should read this document before attempting to install and use a new release of LS2020 software.

- *LightStream 2020 Online Help*

  Provides online help screens for the LS2020 command line interface and the configuration program.

- *Internetworking Terms and Acronyms*

  Provides a glossary of terms and acronyms used in the field of internetworking, including material of interest to users of the LightStream 2020 multiservice ATM switch.

Before attempting to install, configure, operate, or troubleshoot a network of LS2020 switches, it is recommended that you read the *LightStream 2020 System Overview.* This document provides important background information about the LS2020 switch and the ATM technology on which it is based.