About This Manual

This section discusses the objectives, audience, and conventions of the LightStream 2020 System Overview. It also lists related Cisco documentation for the LightStream 2020 multiservice ATM switch (LS2020 switch).

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Document Objectives

This document provides an overview of the LS2020 switch. It introduces the switch and the Asynchronous Transfer Mode (ATM) technology on which the switch is based. It also describes the traffic flow through an LS2020 network and the key features of the switch, such as traffic and network management.

Audience

The LightStream 2020 System Overview is for anyone who installs, configures, operates, or maintains an LS2020 network or anyone who wants a high-level overview of the LS2020 switch.

Users of the LS2020 document set are expected to have a general understanding of basic data communications concepts, some knowledge of UNIX, and a familiarity with the interfaces used by the devices connecting to their LightStream network.

If you are planning to use the bridging features of the LS2020 product, it is recommended that you have a working knowledge of bridging standards and conventions and TCP/IP networks.

Document Organization

This document contains six chapters.

- Chapter 1, "ATM Technology," describes cell relay and ATM technology.
- Chapter 2, "Introduction to LightStream 2020," provides a high-level description of the LS2020 switch, including sections on why the LS2020 product is needed, product structure, and key features.

- Chapter 3, "Network Connections," describes the different network connections that can be used to pass traffic through the network. It also describes the services provided by an LS2020 network.
- Chapter 4, "Traffic Management," explains how the traffic management system allows the LS2020 network to maximize available resources.
- Chapter 5, "Network Management," describes the different kinds of network management tools and functions used for network operation.
- Chapter 6, "Detecting and Correcting Failures," describes features provided to help diagnose and correct failures in an LS2020 networking environment.

Document 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 grouped within curly braces.
- Names of keys on the keyboard are in initial caps (for example, the Tab key). In addition, if a key is referenced in examples of user interaction, it is indicated in **boldface** (for example, press the Tab key).
- Control keys are indicated by a caret preceding a letter: ^A means Control-A.

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 Documentation

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

- LightStream 2020 Site Planning and Cabling Guide
 - This guide tells you how to 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
 - This guide tells you how to install and set up LS2020 switches and how to install LS2020 management software on your network management workstation.
- LightStream 2020 Hardware Reference & Troubleshooting Guide

This guide describes LS2020 hardware and tells you how to diagnose hardware problems and how to replace faulty hardware components.

LightStream 2020 Configuration Guide

The configuration guide provides the information you need to configure LS2020 switches. It describes the configuration tools and how to use them. It describes 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

This guide is a task-oriented book that tells you how to operate a network of LS2020 switches. The guide presents an overview of network operations tasks, describes the command line interface (CLI), and presents procedures for performing monitor and control tasks such as displaying the status of nodes, cards and ports, viewing statistics, and creating collections of traffic data.

LightStream 2020 NP O/S Reference Manual

This manual describes the bash shell and the most frequently used LynxOS commands. It also provides a tutorial introduction and reference guide to the vi editor.

LightStream 2020 Traps Reference Manual

This manual presents an overview of LS2020 traps and explains how they are generated by the LS2020 switch. It provides procedures for managing trap reporting, such as setting trap levels, enabling/disabling individual traps, and determining where traps are displayed. It also describes all SNMP and operational traps. The descriptions include trap name, text, cause, and user response.

LightStream 2020 CLI Reference Manual

This manual describes the syntax and functions of all CLI commands. It also describes the LS2020 private MIB.

LightStream 2020 Command Line Interface (CLI) Reference Card

The reference card compactly summarizes the syntax and arguments of CLI commands

LightStream 2020 Release Notes

The release notes provide a software upgrade procedure and describe new features and special considerations. The release notes also provide information about known software bugs.

LightStream 2020 Online Help

The LightStream 2020 CLI and configuration program both support online help facilities.

• Internetworking Terms and Acronyms

This guide is a glossary of terms and acronyms used in the field of internetworking, including material of interest to users of the LightStream 2020 switch.

To order these publications or additional copies of the LightStream 2020 System Overview, contact your sales representative. (The Customer Order Number for each manual is at the bottom of the title page.) If necessary, ask customer service for the name of your sales representative.

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