Overview

This chapter summarizes the major tasks involved in installing LightStream 2020 enterprise ATM switch hardware and software. The table below lists the primary LS2020 installation and set-up tasks and indicates where specific instructions for performing each task can be found.

Task	Location of Instructions
Preparing for delivery and installation of LS2020 switch	See the *LightStream 2020 Site Planning and Cabling Guide*
Installing LS2020 hardware	The "Installing LightStream 2020 Switch" chapter of this document. See the section "Observing Safety Precautions"
Performing basic StreamView software configuration procedures for your LS2020 switch	The "Installing LightStream 2020 Switch" chapter of this document. See the section "Basic LightStream 2020 Configuration"
Installing the StreamView software on your NMS	The "Installing StreamView Software" chapter of this document
Performing set-up procedures before activating your LS2020 switch in a network	The "LightStream 2020 Set-up Procedures" chapter of this document
Configuring your LS2020 switch to operate as an independent node in a network	See the *LightStream 2020 Configuration Guide*

LightStream 2020 Software

The LS2020 installation and set-up procedures presented in this guide involve two separate, but complementary, bodies of code: the platform (or chassis) software, and the StreamView network management software. Each type of code is described briefly below.

- **Platform Software that Executes in the Chassis NP Card(s)**

  This software is *pre-installed on the LS2020 hard disk prior to chassis shipment.*

  Note, however, that this software does not arrive at your site in a "network-ready" state. You must perform several low-level configuration tasks for this software, such as providing it with IP addresses to make it operable in your networking environment.

  You accomplish these tasks via a console (VT100-compatible terminal) attached to the LS2020 chassis. This console enables you to perform a variety of installation, configuration, and troubleshooting tasks involving the platform software.

  Over time, you may encounter any one of several operating scenarios regarding this platform software that requires user interaction or remedial procedures. These scenarios are described briefly below:

— Upgrading to New Platform Software

If you are a current LS2020 user and you are upgrading to a new version of platform software, you must install the new software on the LS2020 hard disk from a set of distribution floppy disks. You accomplish this task by means of the attached LS2020 console.

In performing the upgrade, you should read the *LightStream 2020 Release Notes* delivered with the release kit. This document contains important, release-specific installation information.

— Encountering Unusual/Abnormal Operating Conditions

If you experience problems with the platform software or the hard disk itself, you may have to re-install the platform software or replace the disk.

In this instance, you should refer to the *LightStream 2020 Network Operations Guide* for remedial actions and recovery procedures.

— Operating with Older Version of Platform Software

If you are operating with the current version of platform software, but you decide, for some cogent reason, to operate with an older version, you must install the applicable version on your LS2020 hard disk.

In this case, you should refer to the applicable *LightStream 2020 Release Notes* for appropriate software installation instructions.

The "Installing LightStream 2020 Switch" chapter describes how you attach a console (terminal) to a new LS2020 switch and enter basic configuration information for the switch in accordance with configuration scripts.

- **<u>StreamView Application Software that Executes in the NMS</u>**

StreamView is a network management application that allows a network administrator to graphically view the topology of an LS2020 network and to monitor and control certain conditions and behaviors of the network. With its robust functionality, StreamView also allows the network administrator to manage the types of interfaces on various constituent systems in the network, to manage trunk utilization and the quality of service across those trunks, and to define circuit routing information.

StreamView software is distributed on 1/4-inch tape. You install this software on the NMS by means of an attached tape drive. The NMS is a standalone Sun workstation that you use to configure, monitor, and control LS2020 switches in your networking environment.

The chapter "Installing StreamView Software" tells you how to install the StreamView software on the NMS so that it can run wither with or without HP OpenView.

Note that the buyer of an LS2020 switch *must install the StreamView software on the hard disk of the NMS.*

Preparing for Delivery of LightStream 2020 Switch

To make adequate preparations for taking delivery of an LS2020 switch, you should first consult the *LightStream 2020 Site Planning and Cabling Guide*. Once this initial site planning is accomplished, you can continue the installation tasks described in this document:

- Ensuring that the selected space meets specific installation standards and environmental requirements

- Installing the LS2020 hardware

- Configuring the LS2020 system appropriately, such as assigning IP addresses

Installing LightStream 2020 Hardware

Hardware installation tasks described in this document include the following:

- Observing appropriate safety precautions in handling and installing LS2020 hardware
- Unpacking and inspecting LS2020 hardware
- Installing the LS2020 switch in an equipment rack
- Installing fantails and interface cables
- Wiring the chassis to a power source (DC-powered systems only)
- Closing the LS2020 chassis
- Powering up the LS2020 system

Configuring LightStream 2020 Software

The basic configuration is the minimum initial configuration needed to make your LS2020 switch operational. Basic configuration data that you must enter for each LS2020 switch includes the following:

- IP addresses
- Date and time
- Passwords for user accounts
- Parameters for at least one trunk line, if you are planning to use trunk lines in your LS2020 configuration.

Note Although trunk lines are typically used in LS2020 configurations, such lines are not required. Also, an FDDI switch application represents a special case in which no trunk lines exist between LS2020 nodes; thus, in this case, you need not set trunk line parameters.

These procedures for defining basic configuration data are described in detail in the section "Basic LightStream 2020 Configuration" of the chapter "Installing LightStream 2020 Switch."

Once the basic configuration tasks for an LS2020 switch are completed, you can configure, monitor, and control your LS2020 network from the NMS using the StreamView network management application. The StreamView software provides the following network management facilities:

- The ability to configure your network by means of the LS2020 configurator.
- The ability to monitor your network by means of the LS2020 monitor.
- The ability to generate topological representations of your network by means of the LS2020 topology map module.
- A command line interface (CLI)
- An enterprise-specific management information base (MIB) for performing SNMP operations.

You can install StreamView on the NMS to run either with or without HP OpenView. If you choose to use the LS2020 topology map module, however, HP OpenView must be installed.

For detailed StreamView installation and configuration procedures, refer to the chapter entitled "Installing StreamView Software."

Setting Up LightStream 2020 for Operations

Set-up procedures are tasks that you perform for each LS2020 switch when you first set up your network. These tasks, which usually need not be performed again, include the following:

- Creating additional user accounts

- Changing the default SNMP community names

- Changing the default delivery addresses for traps (event messages)

- Changing the default terminal type

- Editing the */etc/hosts* file on each LS2020 switch

These tasks are described in detail in the chapter entitled "LightStream 2020 Set-up Procedures."

Configuring the LightStream 2020 Network

To configure an LS2020 network for on-going operations, you use the StreamView network management tools to create a configuration database. The configuration database embodies parameters that define the operating attributes of every LS2020 switch, card, port, and virtual circuit in your LS2020 network.

Detailed instructions for performing these high-level configuration tasks can be found in the *LightStream 2020 Configuration Guide*.