CHAPTER 1

About This Book

This guide that describes operational, SNMP, and informational traps generated by the LightStream 2020 enterprise ATM switch. The guide presents a trap overview and a description of each trap. The trap descriptions include the name of the trap, trap text, an explanation, and possible user actions.

Audience

The *LightStream 2020 Traps Reference Guide* is intended for anyone who operates or manages a LightStream network.

Users of the LightStream 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.

It is recommended that you have a working knowledge of TCP/IP networks. For more information about TCP/IP networks, refer to *Internetworking with TCP/IP, Volume 1, Principals, Protocols, and Architecture*, by Douglas E. Comer (Prentice-Hall Inc., 1991, ISBN 0-13-468505-9).

Organization

The following table shows the organization of this guide.

- About This Book—Describes the audience, organization, and conventions for this book.
- Traps Overview—Presents an overview of LightStream 2020 traps.
- Operational Trapss—Describes the operational traps that may be generated by the LightStream switch.
- SNMP Traps—Describes the SNMP traps that may be generated by the LightStream switch.
- Informational Traps—Describes the informational traps that may be generated by the LightStream switch

Related Documentation

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

- *LightStream 2020 System Overview*

  The system overview explains what a LightStream switch is and how it works. It outlines ATM technology and describes LightStream hardware and software.

- *LightStream 2020 Site Planning and Cabling Guide*

The site planning and cabling guide (SPCG) tells you how to prepare your site to receive LightStream 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 and Troubleshooting Manual*

  The installation and troubleshooting manual (I&TM) tells you how to install LightStream hardware and software, 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 LightStream 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 Operations Guide*

  The operations guide is a task-oriented book that tells you how to operate a network of LightStream 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 Administration Guide*

  The administration guide describes LightStream network management functions such as setting up a new network, troubleshooting, and optimizing the load across trunks. The guide describes network management tools, then presents step-by-step procedures for performing the functions.

- *LightStream 2020 Command and Attribute Reference Guide*

  The reference guide provides detailed descriptions of the syntax and functions of all CLI commands. It also indicates CLI equivalents of configuration procedures, describes the LightStream private MIB, and gives UNIX-style manual pages for selected LynxOS commands.

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

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

- *LightStream 2020 Release Notes*

  The release notes provide a software upgrade procedure and describe new features and special considerations, including information on known software bugs.

Note The release notes contain important information that does not appear in other documents.

Before attempting to install, configure, operate, or troubleshoot a network of LightStream switches, read the *LightStream 2020 System Overview.* This overview provides important background information about the LightStream product and the ATM technology on which the product is based. After reading the *LightStream 2020 System Overview*, refer to the Table 1-1 to determine which manuals you should read next

Table 1-1 Readining Path

If you want to:	Read the following manuals in the order listed below:
Install LightStream switches	*LightStream 2020 Release Notes*[1]
	LightStream 2020 Site Planning and Cabling Guide
	LightStream 2020 Installation and Troubleshooting Manual
Configure LightStream switches	*LightStream 2020 Release Notes*[1]
	LightStream 2020 Configuration Guide
	LightStream 2020 Online Help Screens
Set up or expand a LightStream network	*LightStream 2020 Release Notes*[1]
	LightStream 2020 Administration Guide
	LightStream 2020 Online Help Screens
Operate a LightStream network	*LightStream 2020 Release Notes*[1]
	LightStream 2020 Operations Guide
	LightStream 2020 Command and Attribute Reference Guide
	LightStream 2020 Command Line Interface (CLI) Reference Card
	LightStream 2020 Traps Reference Manual
	LightStream 2020 Online Help Screens
Manage or troubleshoot a LightStream network	*LightStream 2020 Release Notes*[1]
	LightStream 2020 Operations Guide
	LightStream 2020 Administration Guide
	LightStream 2020 Command and Attribute Reference Guide
	LightStream 2020 Command Line Interface (CLI) Reference Card
	LightStream 2020 Traps Reference Manual
	LightStream 2020 Online Help Screens
Troubleshoot LightStream hardware	*LightStream 2020 Release Notes*[1]
	LightStream 2020 Installation and Troubleshooting Manual
	LightStream 2020 Site Planning and Cabling Guide

1. We recommend that you review the release notes before attempting to install, configure, operate, or troubleshoot a LightStream switch. The release notes contain important information that does not appear in other documents.

Text Conventions

Table 1-2 describes conventions used to distinguish different types of text.

Table 1-2 Text Conventions

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.	Issue the clear command.
Italic type	Used for titles of documents and for emphasis. Indicate user-specified parameters or classes of user responses. When you see this notation in a syntax statement, make the substitution but do not type the angle brackets.	*LightStream 2020 Configuration Guide* File names are *case* sensitive. If you see: set port <c.p> <state> you might type: set port 4.3 active
Angle brackets <>	Indicate keys on the keyboard, or optional arguments or parameters for commands. You can omit optional arguments and parameters in any command.	Press [Return].
Square brackets [ ]	When the caret symbol precedes a character, it refers to the control key.	cli> help [<topic>]
	Indicate a choice of arguments or parameters for commands. Arguments or parameters are separated by a vertical line {|}, and you must select *one*.	
Caret symbol ^		^X is the same as [Control] X
Curly braces { }		cli> set cli traplevel {off|info|oper|trace|debug}

CHAPTER 2

Traps Overview

LightStream 2020 enterprise ATM switches generate traps— error and event messages—to indicate that a problem has occurred in your network or to tell you about a change in the status of the network. Refer to the chapters in this manual for details about the traps and instructions on how to respond (if necessary) to the traps. If you need further help interpreting traps, contact your customer support representative.

Trap Types

LightStream switches generate five types of traps:

- SNMP
- Operational
- Informational
- Trace
- Debug

This manual devotes chapters to the SNMP, operational and informational traps you may encounter. Trace and debug traps, which are turned off in most networks, are not discussed in this manual.

SNMP Traps

The SNMP traps displayed by the LightStream switch are the standard SNMP traps defined by the SNMP MIB-2 specifications. These traps include the following information:

- LightStream node name
- System up time when the trap occurred
- Trap name
- Trap generation time
- Port number associated with the trap

Operational Traps

Operational traps are divided into three categories:

- Traps that provide information only

Note Traps in this category provide information only, such as the notification that a line card has come up.

- Traps that require a response

Note Traps in this category indicate problems that you can usually fix by following the procedures described in this manual.

- Traps that you should contact your customer support representative about

Note Traps in the this category indicate that there may be a problem with the LightStream software. These traps are *very* unlikely to occur. If you receive a trap from this category, it is important that you record it and contact your customer support representative immediately, so he or she can determine what actions should be taken.

To distinguish between the operational traps that you can respond to and the traps that you should contact your customer support representative about, look at the trap number. Trap numbers begin with a prefix for the software module in which they occur. The prefix is followed by a number between 1 and 1999. Operational traps that you can respond to using the information provided in this book are numbered between 1 and 999. Operational traps that you should contact your customer support representative about are numbered between 1000 and 1999.

Operational traps numbered over 999 are not listed in this document.

Informational Traps

Informational traps provide supplemental details on problems that are reported by operational and SNMP traps. Informational traps are used by customer support representatives to do advanced troubleshooting and software debugging. The following example shows the traps that a LightStream switch displays.

```
==> Trap from Light1, System Up Time:  0 Hr 1 Min 34 Sec
==> Link Up Trap at 09/16/93 19:10:41 EDT (09/16/93 23:10:41 GMT)
 ==>    Port 2000

==> Trap from Light1, System Up Time: 42 Hr 32 Min 08 Sec
==> Link Up Trap at 09/16/93 19:10:42 EDT (09/16/93 23:10:42 GMT)
 ==>    Port 2001

==> Trap from Light6, System Up Time: 22 Hr 22 Min 8 Sec
==> (OPER) NDD_3 at 09/16/93 19:36:34 EDT (09/16/93 23:36:34 GMT)
==>    Line Card Light6.10 (MS-TR) up.

==> Trap from Light6, System Up Time: 22 Hr 23 Min 41 Sec
 => (OPER) NDD_3 at 09/16/93 19:36:36 EDT (09/16/93 23:36:36 GMT)    ==>    Line Card
Light6.6 (LS-EDGE) up.

==> Trap from Light1, System Up Time: 22 Hr 23 Min 41 Sec
==> (OPER) NPTMM_5 at 09/16/93 19:38:22 EDT (09/16/93 23:38:22 GMT)
==>    Operator Initiated Cutover To Switch A
```

```
==> Trap from Light2, System Up Time: 22 Hr 23 Min 41 Sec
==> (OPER) NPTMM_2 at 09/16/93 19:40:02 EDT (09/16/93 23:40:02 GMT)
==>    Bulk Power Supply B Failed
```

CHAPTER 3

Operational Traps

This chapter lists operational traps. If you need help interpreting these traps, contact your customer support representative.

The traps are grouped by the software module in which they occur. Within each module, traps are listed in numerical order. Each module is described briefly in the *LightStream® 2020 System Overview.*

Operational Traps Listing

Bridge Traps

This section lists bridge traps.

Trap Name	**STP_1002**
Trap Text	Spanning Tree topology changed. Bridge port <port#> transitioned from (learning to forwarding) or from (forwarding to blocking).
Description	This trap is generated by the bridge when one or several of its ports transitioned either from the learning state to the forwarding state or from the forwarding state to the learning state.
Action	No action is required.

Trap Name	**STP_1003**
Trap Text	Spanning Tree topology changed. Bridge port <port#> transitioned from forwarding to blocking state.
Description	This trap is generated by the bridge when one or several of its ports transitioned from the forwarding state to the blocking state.
Action	No action is required.

Trap Name	**FDDI_CAM_FULL_TRAP**
Trap Text	FDDI CAM full trap from <systemname>, System Up Time: 23 Hr 29 Min 50 Sec Port: 5.0 Port: 7.0.
Description	This trap indicates that the CAM for the specified FDDI port has become full.
Action	No action is required. However, this trap indicates that the size of the expanded FDDI LAN exceeds 1000 nodes.

CAC Traps

This section lists traps for the Congestion Avoidance Concentrator (CAC) module.

Trap Name	CAC_1
Trap Text	<caMaxIntervalPermitLimit|caMinIntervalPermitLimit|caMinIntervalCaInfo> Mib Variable Hasn't Been Set by NMS, Defaulted to <default value>
Description	This trap indicates that the specified congestion avoidance attribute has not been configured for a particular line card. The trap appears each time the line card is started.
Action	Configure the three congestion avoidance attributes for each card using the configuration program.

Cardmon Traps

This section lists traps for the Card Monitor (CARDMON) module.

Trap Name	CARDMON_1
Trap Text	<number of discrepancies> table discrepancies on line card <card #>
Description	This trap lists the number of table discrepancies between the VCIs on a card and the VCIs in the NP software.
Possible Cause	Memory is corrupted or there is a software problem.
Action	1 Wait 30 seconds after receiving the trap and then use the **check** command from the cardmon tool to retest for discrepancies. 2 If you still have some discrepancies, wait 30 more seconds, then run the **check** command again. 3 If you still have discrepancies and you know that the network is stable (connections are not being rerouted), either reboot the line card or call your customer support representative. If the network is not currently stable, wait until it is, then rerun the **check** command.

LCC Traps

This section lists traps for the Line Card Control (LCC) process.

Trap Name	LCC_1
Trap Text	Warning Node <node name> port <port #> dlci <dlci #> requested a FR connection to an incorrect VC on port <port #> dlci <dlci #>
Description	This trap reports that a connect request was received from an unconfigured endpoint.
Possible cause	This is typically caused by misconfiguring a VC. It will sometimes occur when a VC is added to the configuration and the change is sent to only one of the two endpoints.
Action	1 Send the correct configuration to the chassis at the opposite end of the VC. 2 If that fails, send the correct configuration to the chassis at the local end of the VC.

Trap Name	LCC_2
Trap Text	Warning Node <node name> port <port #> requested a FF connection to an incorrect VC on port <port #>
Description	This trap reports that a connect request was received from an unconfigured endpoint.
Possible Cause	This is typically caused by misconfiguring a VC. It will sometimes occur when a VC is added to the configuration and the change is sent to only one of the two endpoints.

Trap Name	LCC_2
Action	**1** Send the correct configuration to the chassis at the opposite end of the VC. **2** If that fails, send the correct configuration to the chassis at the local end of the VC.

Trap Name	LCC_3
Trap Text	`Warning Node <node name> port <port #> vci <vci #> requested a UNI connection to an incorrect VC on port <port #> vci <vci #>`
Description	This trap reports that a connect request was received from an unconfigured element.
Possible Cause	This is typically caused by a misconfigured VCC. It will sometimes occur when a VCC is added to the configuration and the change is sent to only one of the two endpoints.
Action	**1** Send the correct configuration to the chassis at the opposite end of the VCC. **2** If that fails, send the correct configuration to the chassis at the local end of the VCC.

Trap Name	LCC_4
Trap Text	`Warning: attempt to configure an incompatible protocol on port <port #>`
Description	This trap reports that an attempt was made to configure the port to support a protocol that cannot be supported by the edge card as it is currently configured.
Possible Cause	This is typically caused by misconfiguring a port. Mixing edge and trunk port protocols on the same card is not allowed. Also, the selection of a card's protocols follows port 0. If port 0 is configured as an edge, all ports on that card will be restricted to edge protocols. If port 0 is configured as a trunk, all ports on that card will be restricted to trunk protocols.
Action	**1** Send the correct configuration to the chassis that is sending the trap. **2** Configure all ports as either edge or trunk ports. **3** Configure port 0, even if it must be configured as a disabled port.

Trap Name	LCC_5
Trap Text	`Warning: port protocol overriding configured card type on port <port #> - card will be rebooted.`
Description	This trap reports that an attempt was made to configure the port to support a protocol that required a different edge card configuration. The EEPROM on the edge card will be changed and the card rebooted. When the line card restarts it should support the type of protocol that port 0 was configured with.
Possible Cause	This trap will often be sent when a new line card is put into a chassis. It will also occur when port 0 is changed from a trunk to an edge port or from an edge port to a trunk.
Action	**1** This problem should be self-correcting. **2** The line card should automatically reconfigure and restart with no operator intervention. **3** If this trap recurs, run diagnostics on the line card. (Refer to the *LightStream 2020 Installation and Troubleshooting Manual* for instructions.)

Trap Name	LCC_6
Trap Text	`Warning Node <node name> port <port #> dlci <dlci #> requested a FR connection to an unconfigured VC on port <port #> dlci <dlci #>`
Description	This trap reports that a connect request was received from an unconfigured endpoint.
Possible Cause	This is typically caused by a misconfigured VCC. It will sometimes occur when a VCC is added to the configuration and the change is sent to only one of the two endpoints.
Action	**1** Send the correct configuration to the chassis at the local end of the VCC. **2** If that fails, send the correct configuration to the chassis at the opposite end of the VCC.

Trap Name	LCC_7
Trap Text	Warning Node <node name> port <port #> requested a FF connection to unconfigured VC on port <port #>
Description	This trap reports that a connect request was received from an unconfigured endpoint.
Possible Cause	This is typically caused by a misconfigured VCC. It will sometimes occur when a VCC is added to the configuration and the change is sent to only one of the two endpoints.
Action	Send the correct configuration to the chassis at the local end of the VCC. If that fails, send the correct configuration to the chassis at the opposite end of the VCC.

Trap Name	LCC_8
Trap Text	Warning Node <node name> port <port #> vci <vci #> requested a UNI connection to an unconfigured VC on port <port #> vci <vci #>
Description	This trap reports that a connect request was received from an unconfigured endpoint.
Possible Cause	This is typically caused by a misconfigured VCC. It will sometimes occur when a VCC is added to the configuration and the change is sent to only one of the two endpoints.
Action	**1** Send the correct configuration to the chassis at the local end of the VCC. **2** If that fails, the correct configuration should be sent to the chassis at the opposite end of the VCC.

Trap Name	LCC_9
Trap Text	Warning FF port <port #> configured with less VCC bandwidth than Port Bandwidth
Description	The frame forwarding port's VCC was configured to pass less than the line rate's worth of bandwidth. This is a warning of a potential misconfiguration.
Possible Cause	This is either an actual configuration error or the intent is to configure a VCC for the line that cannot handle a full line's worth of data.
Action	Review the configuration. Update the configuration if a problem is found.

Trap Name	LCC_10
Trap Text	Warning LC reported error <error#> on port <port#>
Description	An attempt was made to configure an illegal value on the line card.
Possible Cause	Creating an illegal combination of configuration values with the configure tool or directly with the command line interface (CLI).
Action	Fix the error reported by the line card. (This depends on the message from the line card.)

Trap Name	LCC_11
Trap Text	Warning LC reported error illegal physical port type on port <port#>
Description	The line card determined that it has an illegal physical port selected.
Possible Cause	Internal jumper settings must be appropriate for the access card and fantail combination.
Action	Verify that the fantail is correctly connected to the access card (and jumpered, if appropriate).

Trap Name	LCC_12
Trap Text	Node <node name> port <port #> entering internal loop mode
Description	This trap reports that the port has entered internal loop mode.

Trap Name	LCC_12
Possible Cause	The **loop** command has been issued to run an internal loopback test on the port.
Action	No action is required.

Trap Name	LCC_13
Trap Text	Node <node name> port <port #> entering external loop mode
Description	This trap reports that the port has entered external loop mode.
Possible Cause	The **loop** command has been issued to run an external loopback test on the port.
Action	No action is required.

Trap Name	LCC_14
Trap Text	Node <node name> port <port #> entering remote loop mode
Description	This trap reports that the port has entered remote loop mode.
Possible Cause	The **loop** command has been issued to run a remote loopback test on the port.
Action	No action is required.

Trap Name	LCC_15
Trap Text	Node <node name> port <port #> unlooped
Description	This trap reports that the port has exited loop mode.
Possible Cause	The **unloop** command has been issued to stop the loopback test on the port.
Action	No action required

Trap Name	LCC_16
Trap Text	Node <node name> port <port #> is experiencing a high error rate
Description	This trap reports that the port has a high receive or transmit error rate.
Possible Cause	This trap is sent when a port's receive or transmit error rate exceeds its error threshold.
Action	Examine the node to determine why the error rate is high.

NDD Traps

This section lists traps for the Neighborhood Discovery Daemon (NDD).

Trap Name	NDD_1
Trap Text	Network Processor <slot#> becoming primary NP.
Description	This trap is provided for information only. When the system boots, it indicates the slot number of the NP that is operating as the primary NP (if you have two NPs in your system).
Action	No action is required.

Trap Name	NDD_2
Trap Text	Network Processor <slot#> becoming backup NP.

Trap Name	NDD_2
Description	This trap is provided for information only. When the system boots, it indicates the slot number of the NP that is operating as the backup NP (if you have two NPs in your system).
Action	No action is required.

Trap Name	NDD_3
Trap Text	`Line Card <node name:card number> (<card type>) up.`
Description	This trap is provided for information only. It indicates that a particular line card has come up.
Action	No action is required.

Trap Name	NDD_4
Trap Text	`Line Card <node name:card number> (<card type>) down (switch up/down failure).`
Description	This trap indicates a failure in the line card hardware.
Action	Run diagnostics on the specified line card. (Refer to the *LightStream 2020 Installation and Troubleshooting Manual* for instructions.)

Trap Name	NDD_5
Trap Text	`Line Card <node name:card number> (<card type>) down (ERMP failure <ERMP code>.`
Description	This trap indicates a failure in the line card hardware.
Action	Run diagnostics on the specified line card.

Trap Name	NDD_6
Trap Text	`System Process <process type> exited unexpectedly (status <value>).`
Description	This trap is provided for information only. The specified process exited unexpectedly. The process should be restarted automatically by NDD.
Action	If this trap occurs repeatedly, contact your customer service representative.

Trap Name	NDD_7
Trap Text	`Line Card Control Process for <node name:slot number> exited unexpectedly (status <value>).`
Description	This trap is provided for information only. The LCC process on the specified card exited unexpectedly. The process should be restarted automatically by NDD.
Action	If this trap occurs repeatedly, contact your customer service representative.

Trap Name	NDD_10
Trap Text	`Mismatch between programmed chassis id <id # from eeprom> and configured chassis id <id # from configuration>`
Description	This trap indicates that the MIB variable chassisId does not match the chassis ID configured in the EEPROM in the midplane.
Possible Cause	Your chassis ID has not been configured correctly or the midplane has been replaced and the correct chassis ID has not been configured.

Trap Name	NDD_10
Action	If you are just starting a new system, verify that the chassis ID in your configuration database matches the chassis ID in the EEPROM of the midplane. To see the chassis ID in the midplane, use the CLI command **show tcs <SA|SB> midplane.** If the configuration database does not use the same chassis ID, reconfigure the chassis ID in the configuration program. If you have replaced the midplane, verify that the chassis ID for replacement midplane has been set to the same value as the chassis ID in the original midplane. (To set the chassis ID in the EEPROM, type **set tcs <SA|SB> midplane nodeaddress <chassis ID>.** The chassis ID is stored in *two* EEPROMs on the midplane and they *must* match. Issue the command twice, once for SA and once for SB. A detailed procedure for setting chassis IDs is provided in the *LightStream 2020 Installation and Troubleshooting Manual.)*

Trap Name	NDD_11
Trap Text	`Mismatch between programmed midplane chassis IDs in redundant switches (<chassis ID in slot A> vs <chassis ID in slot B>)`
Description	This trap indicates that the chassis IDs in the two switch card slots (SA and SB) of the midplane do not match.
Action	Call your customer service representative.

NPIP Traps

This section lists traps for the Network Processor Internet Protocol (NPIP) module that provides IP service.

Trap Name	NPIP_1
Trap Text	`NPIP: <file name>: <line number>: fatal consistency error <error string>`
Description	This trap indicates there is an internal problem with the NPIP process.
Action	Contact your customer support representative.

Trap Name	NPIP_3
Trap Text	`configuration error: the internal IP network overlaps with the ethernet IP network`
Description	This trap indicates that the software checks provided by the LightStream configuration program failed to discover an overlap between the internal IP network and the ethernet IP network.
Possible Cause	There is a problem with the configuration program and the configured addresses.
Action	**1** Use the configuration program to reconfigure these addresses on the screen titled IP Addresses Menu for LightStream 2020 Chassis. **2** Download the new configuration.

Trap Name	NPIP_4
Trap Text	`configuration error: the internal IP network address is the same as the ethernet IP address`
Description	This trap indicates that the software checks provided by the LightStream configuration program failed to discover that the internal IP network address and the ethernet IP address have been configured to the same value.
Possible Cause	There is a problem with the configuration program and the configured addresses.
Action	**1** Use the configuration program to reconfigure these addresses on the screen titled IP Addresses Menu for LightStream 2020 Chassis. **2** Download the new configuration.

Trap Name	NPIP_5
Trap Text	`configuration error: the default router is not on the same IP network as the ethernet interface`
Description	This trap indicates that the software checks provided by the LightStream configuration program failed to discover that the default router is not configured correctly.
Possible Cause	There is a problem with the configuration program and the address.
Action	**1** Use the configuration program to reconfigure this address on the screen titled IP Addresses Menu for LightStream 2020 Chassis. **2** Download the new configuration.

Trap Name	NPIP_6
Trap Text	`configuration error: the primary and secondary NP IP addresses are not on the same IP network`
Description	This trap indicates that the software checks provided by the LightStream configuration program failed to discover that the primary and secondary NP IP addresses are not configured correctly.
Possible Cause	There is a problem with the configuration program and the NP IP addresses.
Action	**1** Use the configuration program to reconfigure these addresses on the screen titled IP Addresses Menu for LightStream 2020 Chassis. **2** Download the new configuration.

NPTMM Traps

This section lists traps for the NP TCS Monitoring Module (NPTMM) process.

Trap Name	NPTMM_1
Trap Text	`Initiating Card <1-10> Reset Due To Planned Cutover To Switch <A or B>`
Description	Performing a cutover from one switch card to the other may cause other cards in the LightStream switch to automatically reset. This trap indicates which cards are reset as a result of planned cutover.
Action	No action is required.

Trap Name	NPTMM_2
Trap Text	`Bulk Power Supply <A or B> Failed`
Description	One of the bulk power supplies failed.
Action	Remove the failed power supply and replace it with a spare, as described in the *LightStream 2020 Installation and Troubleshooting Manual*. If your switch has two power supplies, the second one can fully power the switch while the failed one is being replaced.

Trap Name	NPTMM_4
Trap Text	`Initiating Card <1-10> Reset Due To Unplanned Cutover to Switch <A or B>`
Description	Cutting over from one switch card to the other may cause other cards in the LightStream switch to automatically reset. This trap indicates which cards are reset as a result of an unplanned cutover.
Action	If the switch card failed, you must replace it. (Refer to the *LightStream 2020 Installation and Troubleshooting Manual* for instructions.)

Trap Name	NPTMM_5
Trap Text	Operator Initiated Cutover to Switch <A or B>
Description	This trap is provided for information only. A user has instructed the system to make the backup switch card become the active (primary) switch card.
Action	No action is required.

Trap Name	NPTMM_6
Trap Text	<parameter name> of card <card #> is outside of the normal range where <parameter name> = Temperature #1 Temperature #2 TCS VCC Voltage VCC Voltage SCSI Voltage (for NP) VEE Voltage VPP Voltage Paddle Card Temperature #1 Paddle Card Temperature #2
Description	The specified value, monitored by the TCS, is outside of its normal range.
Action	1 For the temperature-related traps, verify that the ambient temperature in the room is within the range specified in the *LightStream 2020 Site Planning and Cabling Guide.* Also verify that the blowers are operating properly and that the air intakes on the LightStream switch are not blocked. See the *LightStream 2020 Installation and Troubleshooting Manual* for more troubleshooting information. 2 For the voltage-related traps, contact your customer support representative.

Trap Name	NPTMM_7
Trap Text	Clock From Switch <A or B> Failed On Card <card number>
Description	This trap indicates that the clock provided to the line cards from the switch card has failed. This indicates that there might be a hardware problem.
Action	Run diagnostics on the specified line card.

Trap Name	NPTMM_8
Trap Text	Card <card #> POST Failed; Download Is Not Initiated
Description	This trap indicates the power on self test failed. This indicates there might be a hardware problem.
Action	1 Review the results of the POST. 2 Reset the specified card and rerun the POST. 3 If the problem persists, run diagnostics on the specified card. If the diagnostics fail or if the card will not come up, replace the card. (Refer to the *LightStream 2020 Installation and Troubleshooting Manual* for instructions.)

Trap Name	NPTMM_9
Trap Text	Card <card #> Download Failed More Than <number of times download failed, default=2> Times; New Download Is Not Initiated

Trap Name	NPTMM_9
Description	This trap indicates the download of the specified card has failed multiple times. This indicates there may be a hardware problem.
Action	Run diagnostics on the specified card. If the diagnostics fail or if the card will not come up, replace the card. (Refer to the *LightStream 2020 Installation and Troubleshooting Manual* for instructions.)

Trap Name	NPTMM_10
Trap Text	`Chassis ID inconsistency [FATAL error] (switch <A or B> programmed to <actual chassis ID> instead of expected <expected chassis ID)`
Description	This trap indicates that the chassis IDs in the two switch card slots (SA and SB) of the midplane do not match.
Action	Contact your customer support representative.

Trap Name	NPTMM_11
Trap Text	`PROCESS FATAL ERROR: <code>`
Description	This trap indicates that a software error has occurred.
Action	Contact your customer support representative.

RMON Traps

This section lists traps for the Remote Monitoring (RMON) module that is used to handle the RMON portion of the MIB.

Trap Name	RMON_1
Trap Text	RMON ALARM: <Rising|falling> event (<rising|falling> from <previous value> to <current value> for <MIB object>
Description	This trap indicates that a MIB object that you are monitoring has fallen below or has exceeded its threshold level.
Action	Varies depending on the object that is being monitored.

TRUNKMON Traps

This section lists traps for the Trunk Monitor (trunkmon) module. (Refer to the *LightStream 2020 Administration Guide* for a discussion of the trunkmon program.)

Trap Name	TRUNKMON_1
Trap Text	`<number of discrepancies> discrepancies on port <nodename.card#.port#> (<# of seconds> second retry)`
Description	This trap lists the number of discrepancies in the VCCs between two ports. If there are no discrepancies, the VCCs on both ports should match. If you receive this trap, the system has already retested once at the time interval specified in the trap. The default retry timer is 15 seconds.
Possible Cause	Memory is corrupted or there is a software problem.

Trap Name	TRUNKMON_1
Action	**1** Wait 30 seconds after receiving the trap and then use the **check** command from the trunkmon tool to retest for discrepancies. **2** If you still have some discrepancies, wait 30 more seconds, then run the **check** command again. **3** If you still have discrepancies and you know that the network is stable (connections are not being rerouted), deactivate the port on one end of the line, then reactivate it, or call your customer support representative. If the network is not currently stable, wait until it is, then rerun the **check** command.

Watchdog Traps

This section lists traps for the NP Watchdog Timer Manager (WATCHDOG) process.

Trap Name	WATCHDOG_1
Trap Text	`Neighborhood discovery daemon failure, rebooting system.`
Description	The NDD process monitors all processes in the network and restarts them automatically when necessary. The watchdog process is used to monitor the status of NDD itself and determine when NDD needs to be restarted. This trap indicates that NDD has failed and that the watchdog process is rebooting the system to restart NDD. Once NDD is restarted, all other processes are restarted by NDD.
Action	This trap is provided for information only. If it occurs repeatedly, contact your customer support representative.

CHAPTER 4

SNMP Traps

This chapter lists SNMP traps. If you need help interpreting these traps, contact your customer support representative.

SNMP Traps Listing

This section lists the SNMP traps for the LightStream 2020 enterprise ATM switch process that runs on the network processor.

Trap Name	**Link Down**
Trap Text	`Link down trap from Light7, System Up Time:23 Hr 29 Min 50 Sec Port: 5.0`
Description	If a switch misses an established number of trunk up/down messages, SNMP sends this trap to notify you of the network event.
Action	If the trunk is not returned to service within 10 minutes, run the loopback tests described in the *LightStream 2020 Administration Guide.*

Trap Name	**Link Up**
Trap Text	`Link up trap from Light7, System Up Time: 23 Hr 29 Min 55 Sec Port: 5.0`
Description	When a trunk is returned to service, by the trunk up/down protocol, SNMP sends this trap to notify you of the network event. No action is required.
Action	No action required.

Trap Name	**Card Down**
Trap Text	`Card down trap from Light7, System Up Time:23 Hr 29 Min 50 Sec Port: 5.0`
Description	When a card is removed from service, SNMP sends this trap to notify you of the network event.
Action	If the trunk is not returned to service within 10 minutes, run the loopback tests described in the *LightStream 2020 Administration Guide.*

Trap Name	**Card Up**
Trap Text	Card up trap from Light7, System Up Time: 23 Hr 29 Min 55 Sec Port: 5.0
Description	When a card is returned to service, SNMP sends this trap to notify you of the network event.
Action	No action is required.

CHAPTER 5

Informational Traps

This chapter lists informational traps. Informational traps are used by customer support representatives to do advanced troubleshooting and software debugging.

The traps are grouped by the module in which they occur. Within each module, traps are listed in numerical order.

Bridge Traps

This section lists bridge traps. There is only one in the current release. If you need further help interpreting this trap, contact your customer support representative.

Trap Name	**STP_1001**
Trap Text	`Spanning Tree topology changed. New Spanning Tree Root is <systemname>, bridge id xx:xx:xx:xx:xx:xx`
Description	This trap indicates that the sending agent has become a new root of the Spanning Tree. The system name (<systemname>) is provided, if known.
Action	No action is required.