CHAPTER 2

The Show Command

Use the **show** command to display the value of a specified parameter of a LightStream 2020 multiservice ATM switch (LS2020 switch), or to display the state of the CLI program. The first argument of the command defines families of **show** commands. The command families are given in the following list, together with the titles of the sections of this chapter in which they are discussed:

show bflt **show ipflt** **show ipxflt**	Traffic Filters
show card	Card Attributes
show chassis	Per-Node (Chassis) Attributes
show cli	CLI Display and Logging Attributes
show collection	Collections of Statistical Counts
show config	Configuration Lock Attribute
show file	Files
show gid	Global Information Distribution Attributes
show mcast	Multicast Groups
show modem	Modem Initialization String
show nd	Neighborhood Discovery Attributes
show nettime	Network Timing Attributes
show pid	Per-Process Attributes
show port	Per-Port Attributes
show snmp	SNMP Attributes
show spt **show stb**	Spanning-Tree Bridge Attributes
show tcs	Test and Control System Attributes
show tprof	Traffic Profiles
show trap	Trap Status

Traffic Filters

Use the commands of this family to display traffic filters created with the **define** command. See also the **show tprof** command for traffic profiles and the **show mcast** command for multicast groups.

show bflt

Use the **show bflt** [*ID*] command to display bridge traffic filter conditions or profiles created with the **define bflt** command.

Use the optional *ID* argument to limit the display to the filter or traffic profile specified by *ID*. By default, all currently defined filters or traffic profiles are displayed.

show ipflt

Use the **show ipflt** [*ID*] command to display traffic filters or profiles created with the **define ipflt** command.

Use the optional *ID* argument to limit the display to the filter or traffic profile specified by *ID*. By default, all currently defined filters or traffic profiles are displayed.

show ipxflt

Use the **show ipxflt** [*ID*] command to display traffic filters or profiles created with the **define ipxflt** command.

Use the optional *ID* argument to limit the display to the filter or traffic profile specified by *ID*. By default, all currently defined filters or traffic profiles are displayed.

Card Attributes

Use the commands of the **show card** family to display per-card attributes.

In these commands, the first argument, *card#*, is a card number. Use the **show chassis cards** command to display card numbers.

show card card# all

Use the **show card** *card#* **all** command to display all card attributes (including name, process ID, status, version, hardware information, peak cell rate, and information about configured ports). Use the other *parameter* arguments to specify selected parts of this display.

show card card# hardware

Use the **show card** *card#* **hardware** command to display (1) the card type (for example, `LS edge`), (2) temperature readings at the top and bottom of the chassis, (3) Voltages for TCS VCC, VCC, and Vee (or SCSI voltage for NP, BULK voltage for switch card), and (4) temperature readings from Region 1 of an access card, and from Region 2 if applicable.

You may also use the **show tcs** *card#* **voltage** command to display voltages and the **show tcs** *card#* **temperature** to display temperature readings. The output of these **show tcs** commands includes the normal range for each voltage reading, and the warning and shutdown values for each temperature reading.

show card card# name

Use the **show card** *card#* **name** command to display the card name.

Normally, you set this string in a field of the StreamView graphical configuration tool. If you must set it in the CLI, use the **setsnmp cardname.***card# name* command, where *card#* is the card number and *name* is an arbitrary string. Use of a consistent name format, such as *hostname***.***card#*, is convenient for administrative purposes.

show card card# peak-cell-rate

Use the **show card** *card#* **peak-cell-rate** command to display the peak cell rate on a CLC card configured for 4-port T3/E3 trunk or 1-port OC-3 trunk operation.

show card card# ports

Use the **show card** *card#* **ports** command to display information about each port configured on the card: the port number, the protocol used (for example, Frame Relay or CLC Trunk), the port name, and the administrative and operational status. The port name is an arbitrary string set with the command **setsnmp portInfoName.***portID name*, where *portID* is the port number in long format *ccctpp* (see the chapter entitled "LightStream 2020 MIB Reference"). You may wish to establish a naming convention for administrative convenience, such as the name format *hostname***.***c***.***p*, where *c* is the card number and *p* is the port number.

Example

The following example shows how to determine what ports are configured on card 3 on the switch that you are interrogating.

```
cli> show card 3 ports
Port   Protocol          Name                       Admin Stat     Oper Stat
----   --------          ----                       ----------     ---------
3.0    Frame Relay       HQ.3.0                        Up            Up
3.1    Frame Relay       HQ.3.1                        Up            Up
3.2    Frame Relay       HQ.3.2                        Up            Up
3.3    Frame Relay       HQ.3.3                        Up            Up
3.4    Frame Relay       <unconfigured name>           Up            Testing
3.5    Frame Relay       <unconfigured name>           Up            Down
3.6    Frame Relay       <unconfigured name>           Up            Up
3.7    Frame Relay       <unconfigured name>           Up            Down
cli>
```

Note that ports 4, 5, 6, and 7 on card 3 are configured; it is only the card name that is unconfigured.

show card card# processid

Use the **show card** *card#* **processid** command to display the process ID associated with the specified card.

show card card# status

Use the **show card** *card#* **status** command to display the status of the card. There are three kinds of card status:

Operational status	The actual current status of the card.
Administrative status	The preferred status to which the card is restored on reset.
Configuration register	The status of the board hardware, as read from the TCS board status register.

In each case, the status may be up, down, testing, or empty (if no card is present in the slot).

show card card# version

Use the **show card** *card#* **version** command to display version information for LC software and LCC software on the card.

Per-Node (Chassis) Attributes

Use the **show chassis** commands to display node-wide attributes.

show chassis all

Use the **show chassis all** command to display the chassis attributes. Use the other *parameter* arguments to specify selected parts of this display. The **show chassis all** command produces the same displays in the following order: general, agent, congestion, primaryswitch, powersupply, cards, listff, listdlci, listvci, listtrunk, and listpvc.

show chassis agent

Use the **show chassis agent** command to display the following MMA attributes: MMA trap filter level, MMA trap logging state, MMA collection size, on/off state of the `Config DB Active` attribute, MMA PID number, configuration host name, configuration author, and configuration ID number.

show chassis cards

Use the **show chassis cards** command to display the type of card in each slot, or to display `Empty` if there is no card in a given slot.

Example

The following example shows what cards are present on the switch that you are interrogating.

```
cli> show chassis cards
Slot 1:  NP
Slot 2:  Cemac
Slot 3:  FDDI
Slot 4:  Empty
Slot 5:  Empty
Slot 6:  OC3 Trunk
Slot 7:  OC3 Edge
Slot 8:  T3 Trunk
```

```
Slot 9:  LS Edge
Slot 10: Ethernet
Slot SA: Switch2
Slot SB: Empty
cli>
```

show chassis congestion

Use the **show chassis congestion** command to display the maximum and minimum intervals between permit limit updates and the minimum interval between CA updates.

show chassis general

Use the **show chassis general** command to display the node name, node description (for example, ATM Data Switch), contact person, location, system up time, console trap level, chassis ID, slot of NP being used by CLI, primary and secondary IP addresses and subnet masks, Ethernet address and mask, and default router address.

show chassis listdlci

Use the **show chassis listdlci** command to display a frame relay DLCI table for all frame forwarding ports. (To display per-port information, use the **show port** *c.p* **listdlci** command.) An asterisk (`*`) next to the port number means the circuit is deactivated, and the letter `I` means it is disabled by a configuration change.

show chassis listff

Use the **show chassis listff** command to display a table of frame forwarding connections. The display shows the source node and port, destination node and port, insured rate and bandwidth, and maximum rate and bandwidth. If the VC is unconnected, the operationally requested maximum rate is displayed. If it is connected, the displayed value (which is actually in use) may have been negotiated down. An asterisk (`*`) next to the port number means the circuit is deactivated, and the letter `I` means it is disabled by a configuration change.

show chassis listpvc

Use the **show chassis listpvc** command to display a PVC table for all CEMAC (constant bit rate) ports. The **show port** *c.p* **cbrpvc** command displays per-port information. An asterisk (`*`) next to the port number means the circuit is deactivated, and the letter `I` means it is disabled by a configuration change.

show chassis listtrunk

Use the **show chassis listtrunk** command to display a table of all trunk ports.

show chassis listvci

Use the **show chassis listvci** command to display a VCI table for all ATM UNI ports. The **show port** *c.p* **listvci** command displays per-port information. An asterisk (`*`) next to the port number means the circuit is deactivated, and the letter `I` means it is disabled by a configuration change.

show chassis powersupply

Use the **show chassis powersupply** command to display the state and type of Power Supply A and Power Supply B.

show chassis primaryswitch

Use the **show chassis primaryswitch** command to display which switch card is primary (Switch A or Switch B).

CLI Display and Logging Attributes

Use the **show cli** commands to display CLI display and logging attributes.

show cli all

Use the **show cli all** command to display all cli attributes. The output of the command displays the attributes in the following order: echosource, lineedit, log, term, time, timer, traplevel, debug, and banner. The other *parameter* arguments display selected parts of this display.

show cli banner

Use the **show cli banner** command to display the banner that appears when you log in.

show cli debug

Use the **show cli debug** command to display the on/off setting of the debug switch (for development and support personnel only).

show cli echosource

Use the **show cli echosource** command to display the on/off status of the CLI echo source. If echo source has been turned on with the command **set cli echosource on**, then the CLI commands in a script file are echoed to the screen when you execute them with the **source** command.

show cli lineedit

Use the **show cli lineedit** command to show whether command-line editing is on or off. (Use the **set cli lineedit** command to turn this attribute on or off.)

show cli log

Use the **show cli log** command to display the status of the CLI trap logging function. The output of the command either says the function is off or displays the name of a log file if it has been turned on with the command **set cli log** *logfile*.

show cli retries

Use the **show cli retries** command to display the number of times the CLI repeats an SNMP request if no response is received to the first attempt. Use the command "**set cli retries**" to set the number of retries.

show cli term

Use the **show cli term** command to display the configured terminal type for the CLI, for example, `vt100`.

show cli time

Use the **show cli time** command to display the current date and time.

show cli timeout

Use the **show cli timeout** command to display the current SNMP timeout value. The CLI waits this number of seconds before timing out on an SNMP request to a target that does not respond right away. Timing out is affected by the retry value set by the command "**set cli retries**;" see that command for more information.

show cli timer

Use the **show cli timer** command to display the time elapsed since this CLI session was started, or since the command **set cli timer** was last executed.

show cli timestamp

Use the **show cli timestamp** command to see whether the timestamp feature is turned on or off. See the command **set cli timestamp**.

show cli traplevel

Use the **show cli traplevel** command to display the current traplevel setting (Off, Oper, Info, Trace, or Debug). See the *LightStream 2020 Traps Reference Manual* for information about LS2020 traps.

Collections of Statistical Counts

Use the **show collection** command to display a specified collection record.

show collection

Use the **show collection** *collection#* command to display the collection record identified by *collection#*. Each collection record includes collection status, operational status of the node, beginning time and ending time of the collection, the interval between taking collection entries, and the pathname and size of the file in which the collection record is written. This preliminary part of the record is followed by the name and value of a series of collection items. For example, the collection item collectDBObjectID.1.17 is the 17th object in collection number 1. The form of the entry gives more information. For example, ifInOctets.7004 and ifInErrors.7004 are entries for Card 7, Port 4.

Configuration Lock Attribute

Use the **show config** command to display the status of the configuration lock attribute.

show config

The **show config** command displays the status (locked, unlocked) of the configuration database lock. See the **set config** command (in the chapter entitled "The Set Command").

Files

Use the **show file** commands to display the contents of log files and collection files.

Note The **show file** commands access files *only* on the node on which the CLI is running when you execute them, regardless of a target set with the command **set snmp hostname** *name*. These commands are not available when the CLI is run remotely (for example, on a workstation).

The **show file** commands invoke the **cbufpr** command at the operating system level (see the *LightStream 2020 NP O/S Reference Manual*). The first command argument is not an actual file name. Instead, it is one of the following file designators: **all**, **collection**, **configlog**, **mmalog**, or **traplog**. You can include the **tail** argument optionally (except not with the **all** argument) to display only the last portion of a file.

show file all

Use the **show file all** command to display the log files (configuration log, MMA log, and trap log). The **tail** argument is not available with the **show file all** command.

show file collection

Use the **show file collection** *collection#* [**tail**] command to display the contents of the specified collection file. The collection file is /usr/tmp/collector/collect.*collection#*. The contents of the file depend upon the MIB variables specified in the **set collection** commands that defined the collection. Use the optional **tail** argument to display the last 20 lines or so of the designated file.

show file configlog

Use the **show file configlog** [**tail**] command to display the contents of the configuration log file. The pathname of the configuration log file is /usr/tmp/configure/configure.netdb.log. The file contains a log of all configuration operations on this node. Use the optional **tail** argument to display the last 20 lines or so of the designated file.

show file mmalog

Use the **show file mmalog** [**tail**] command to display the contents of the MMA log file. The MMA log file is /usr/tmp/mma/mma.log. The file contains a log of SNMP **set** commands sent to the node for which this log is kept. With each **set** command is shown the IP address of the source of the command. Use the optional **tail** argument to display the last 20 lines or so of the designated file.

show file traplog

Use the **show file traplog** [**tail**] command to display the contents of the trap log file. The trap log file is /usr/tmp/mma/mma.traplog. The file contains a log of all traps sent to the MMA. Use the optional **tail** argument to display the last 20 lines or so of the designated file.

Global Information Distribution Attributes

Use the **show gid** command family to display attributes relating to global information distribution (GID) within the target node.

show gid all

Use the **show gid all** command to display all gid attributes (general, synchronization, cards, clients, neighbors, ports, and ip). The other *parameter* arguments display selected parts of this display.

show gid cards

Use the **show gid cards** command to display a table of cards managed by GID, showing the host name (Chassis), slot number, sequence number, age (in seconds), originating NP, and number of configured ports.

show gid clients

Use the **show gid clients** command to display a table of clients managed by GID. F or each client process ID (PID), the table lists the values of the following counters: link state (LS) announcements received, IP address translation announcements received, generic global information announcements received, transmitted events, and paths generated.

show gid general

Use the **show gid general** command to display the software version number, the process ID (PID) for GID, the amount of memory in use, and the number of memory allocation failures for GID.

show gid ip

Use the **show gid ip** command to display a table of IP addresses managed by GID, showing for each IP address its age, sequence number, the advertising NP, network mask, and port.

show gid neighbors

Use the **show gid neighbors** command to display a table of neighbors managed by GID, showing for each host (chassis) name the VCI number, state, and counts of signals (SYNC, RLL, SLL, Hello, LSA, NLSA, IPA, GA, and NGA).

show gid ports

Use the **show gid ports** command to display a table of ports managed by GID. For each host (chassis) name and port, the table lists the type of service, up/down state, counts for BW0, BW1, and BW2, and the remote port ID. BW0 is raw link capacity, BW1 is data bandwidth, and BW2 is bandwidth in use.

show gid synchronization

Use the **show gid synchronization** command to display counts of neighbors in the following states: existent sync, exchange start, exchange, loading sync, and full sync.

Multicast Groups

Use the **show mcast** command to display defined multicast groups.

show mcast

Use the **show mcast** [*ID*] command to display point-to-multipoint multicast groups which have been created with the **define** command.You can specify a particular defined multicast group by giving its ID as a command argument. If no *ID* argument is given, the command displays all multicast groups.

Modem Initialization String

The modem initialization string is used when a device connects to the node using a modem.

show modem

Use the **show modem** command to display the modem initialization string for a specified switch card.

Note The **show modem** command affects *only* the node on which the CLI is running when you execute it, regardless of any target that has been set with the command **set snmp hostname** *name*.

The **show modem** command requires the slot of the switch card (**sa** or **sb**) as its argument.

Note The display for the inactive switch shows the label Initstring: followed by a null.

The modem initialization string is a sequence of modem commands specifying the state that a modem must assume in order to make a connection. The default string is in Hayes modem command format:

AT&F&D2&C1S0=1S2=128S7=30S36=7S95=44

The following list gives the commands that make up the default string and a description of each.

AT	The attention command.
&F	Restore the factory configuration (set register values to Hayes defaults).
&D2	DTR option: Following loss of the data terminal ready (DTR) signal, the modem disconnects, sends the OK result code, and disables auto answer while DTR is off.
&C1	DCD option: The received line signal detected (RLSD) follows the state of the data carrier from the remote modem.
S0=1	The number of rings until auto-answer = 1.

S2=128 The escape process is disabled. (It is disabled because this command assigns the escape character to a value higher than ASCII 127.)

S7=30 The local modem waits 30 seconds for a carrier signal from the remote modem before hanging up.

S36=7 If the attempted error correction link fails, an MNP connection is attempted. If the MNP connection fails, a normal mode connection is established.

S95=44 Extended result code bit map. The binary equivalent of 44 is 101100. A bit set to 1 enables a set of result codes as follows:

Bit 2: Enable the carrier result codes.

Bit 3: Enable the protocol result codes.

Bit 5: Enable the compression result codes.

If the modem initialization string is set for a modem requiring a different command format, the modem commands in it must put the modem in an equivalent state.

Neighborhood Discovery Attributes

Use the **show nd** command family to display attributes of the neighborhood discovery (ND) system.

show nd all

Use the **show nd all** command to display all ND attributes. The command output includes all the material that is shown separately by the other arguments of the command, in the following order: general, ndcards, neighbors, switchupdown, switchstat, and clients).

show nd clients

Use the **show nd clients** command to display a table of ND clients. For each PID, the table lists the type (for example, sys, ca, gid, or lcc), subtype, and mask.

show nd general

Use the **show nd general** command to display the software version number, PID for the ND, amount of memory in use by ND, and numbers of timers processed, line cards managed by ND, neighbor NPs known to ND, and registered ND client processes.

show nd ndcards

Use the **show nd ndcards** command to display a table of cards managed by ND. For each card, the table shows the EIA port, channel number, and up/down state.

show nd neighbors

Use the **show nd neighbors** command to display a table of ND neighbors. For each ND neighbor, the table shows the EIA port, channel number, and up/down state.

show nd switchstat

Use the **show nd switchstat** command to display a table of ND switch statistics. For each slot, the table shown the number of switch up/down cells in and out, with error counts for each.

show nd switchupdown

Use the **show nd switchupdown** command to display a table of the operational and administrative values of ND up/down parameters. The table shows the following information for each card:

Interval	ND sends up/down messages to this card this often (in multiples of 100 ms, default 3).
J	ND must receive J/M messages to bring the line up (default 1).
K	ND must receive K/N messages to bring the line up (default 1).
M	ND must receive J/M messages to bring the line up (default 1).
N	ND must receive K/N messages to bring the line up (default 1).

You can set the MIB objects ndAdminIntvl, ndAdminJ, etc., to fine-tune ND performance, but doing so is not recommended.

Network Timing Attributes

Use the **show nettime** command to display network timing information for the node.

If the administrative value for the clocking switch is Auto, the operational value for the clocking switch indicates whichever switch card is active, for this is the switch card that is actually being used to distribute clocking to line cards.

If the configured preference level is other than 1, the configured preference level must have been reset with the **set nettime reset-level** command. If the active preference level is other than 1, it could be either because the active preference level was reset with the **set nettime reset-level** command, or because one or more clocking sources at the top of the table became unavailable.

The entire table is listed at the bottom of the display, including the status of each entry. If a clocking source that is preferable to the currently active clocking source is up (having previously been down), you can use the **set nettime reset-level** command to change to the preferred clocking source.

Per-Process Attributes

Use the **show pid** command family to display per-process attributes for a specified process. Each command in this family requires a process ID number (PID) or a process alias as an argument.

show pid PID all

Use the **show pid** *pid#* **all** command to display all per-process attributes for process *pid#*. The command output includes all the material that is shown separately by the other arguments of the command, in the following order: name, clialias, createtime, adminstatus, operstatus, traplevel.

show pid PID name

Use the **show pid** *pid#* **name** command to display the PID name for process *pid#*.

show pid PID clialias

Use the **show pid** *pid#* **clialias** command to display the alias used by the CLI for process *pid#*.

show pid PID createtime

Use the **show pid** *pid#* **createtime** command to display the time elapsed (up time) since process *pid#* was created.

show pid PID adminstatus

Use the **show pid** *pid#* **adminstatus** command to display the administrative status for process *pid#*.

show pid PID operstatus

Use the **show pid** *pid#* **operstatus** command to display the operational status of process *pid#*.

show pid PID traplevel

Use the **show pid** *pid#* **traplevel** command to display the trap level set for process *pid#*. See the *LightStream 2020 Traps Reference Manual* for information about trap levels.

Per-Port Attributes

Use the **show port** command family to display various attributes of a port.

The commands in this family require a port number in dot-separated format (*c.p*,where *c* is the number of a card and *p* is the number of a port on that card). Use the **show chassis cards** command to see card numbers; use the **show card** *card#* **ports** command to see port numbers on card *card#*.

Some information can be provided about any port, regardless of its type: its name, status, physical attributes, and certain statistics. The **show port** commands for displaying this information are described in the section entitled “General Port Information.”

Many port attributes can be displayed only for an appropriate port type. Table 2-1 lists the titles of the sections in this document where the commands for displaying these type-restricted attributes are described, and correlates each port type with its MIB-II type assignment and its protocol.

Table 2-1 Port Attributes That Are Restricted to Certain Port Types

Described in Section	Port Type	MIB-II Type	Protocol
ATM UNI Ports	MS Edge	T3, E3	ATM-UNI
	T3 Edge E3 Edge	T3 E3	ATM-UNI
	OC3 Edge	sonet	ATM-UNI
Constant Bit-Rate Ports	Cemac	other	T1/E1 Circuit Emulation
Frame Forwarding Ports	LS Edge SAC Edge	ds1	Frame Forwarding
Frame Relay Ports	LS Edge SAC Edge	ds1	Frame Relay

Described in Section	Port Type	MIB-II Type	Protocol
Internetworking Ports	FDDI	fddi	FDDI
	Ethernet	ethernet-csmacd	ETHERNET
	Fiber Ethernet	ethernet-cxmacd	ETHERNET
Trunk Ports	LS Trunk SAC Trunk	ds1	T1 Trunk
	MS Trunk	T3, E3	MS Trunk
	T3 Trunk E3 Trunk	T3 E3	CLC Trunk
	OC3 Trunk	sonet	CLC Trunk

Use the **show port** *c.p* **name** command to display the strings shown here in the Port Type column and in the MIB-II Type column. Use the **show card** *card#* **ports** command to display the strings in the Protocol column. See the *LightStream 2020 Configuration Guide* for information about the differences in hardware corresponding to the distinctions among port types.

You can also use the **show chassis cards** command to display the strings in the Port Type column.

The **show port** *c.p* **name** command also displays the transmission medium for certain port types. OC3 ports can be configured for SONET (STS-3c) or SDH (STM-1). Ethernet ports can be either AUI or TPE; for fiber Ethernet, fiber is the only medium type.

Note If you use **show port** commands in rapid succession (seconds apart), discrepancies in rate information appear.

General Port Information

Several arguments of the **show port** command display general port information: **name**, **physical**, **status**, and **statistics**. The **all** argument shows the aggregate of these in one display; this is the default, when **show port** *c.p* is followed by no arguments.

show port c.p [all]

Use the **show port** *c.p* [**all**] command to display all port attributes (name, status, statistics, physical, frameforward, framerelay, DLCI, VCI, PVC, and VPI). The **all** argument is optional, that is, this display is the default if no argument is given. The other *parameter* arguments show selected parts of this display.

Ethernet MAC addresses are displayed in canonical form (least significant bit first) and FDDI MAC addresses are displayed in MSB form (most significant bit first). Thus, for example, Ethernet MAC address `08:00:2B:3C:7F:E2` is displayed as FDDI MAC address `10:00:4D:3C:FE:47`.

show port c.p name

Use the **show port** *c.p* **name** command to display the description, name, type, MIB-II type, MTU, and speed for the specified port. The port type determines what other information is displayed, such as the medium type (for example, SONET or SDH for OC-3 cards).

show port c.p physical

Use the **show port** *c.p* **physical** command to display some of the following physical attributes of the specified port. The detailed content of the display depends upon the type of port. It may include the following:

- Port type
- Operational and administrative CSU type
- Operational and administrative DCE receive bit rate
- Operational transmit bit rate
- Measured bit rate
- Link transmit utilization rate (data plus control)
- Administrative expected DTE rate
- Operational and administrative net interface type (DTE or DCE)
- Operational and administrative protocol
- LC auto-enable state and debug level
- Data cell capacity and available capacity
- Call setup retry and backoff times
- Operational maximum frame size
- Modem status (DCD, DSR)

For a CBR port, the display includes

- Display clock mode
- Data bandwidth
- Cable length or attenuation (specified as “line buildout”)
- Line coding
- Circuit identifier
- Loopback configuration
- Line status. This includes alarms specified in the DS3 MIB. The value Other Failure appears under the following conditions:
  - When HEC mode is out of cell delineation
  - When PLCP mode has PLCP OOF, LOF, or yellow alarm
  - When receive alarm indicator LOF, LOS, or AIS signals persist and integrate to a CSU failure state
  - When a CSU failure state persists and becomes a CSU unavailable state
- Under-runs and over-runs
- Port type (for example, T1 circuit emulation)
- Port restarts
- AAL1 bad sequence
- Dummy cells

- Bit error corrections and discards
- Multi-bit error discards
- Port down cells
- Framing type (PLCP vs. T3 HEC or G.804) for T3 and E3 ports

show port c.p sonet

Use the **show port** *c.p* **sonet** commands to display lists of statistical counts taken during a specified time interval for OC3 ports configured for SONET.

For the specified interval, the command displays the time elapsed and (for the section, line, and path) the number of error seconds, severe error seconds, unavailable seconds (or severe framing error seconds for the section), and coding violations. The display also lists the number of valid intervals.

Counts are collected in 15-minute error-collection intervals. You can specify the interval in one of three ways:

To Specify an Interval This Way ...	Use This Command ...
By number (counting from the beginning of the measurement period, when the system last was rebooted). Interval 0 is the current interval, 1 the previous interval, and so on.	**show port** *c.p* **sonet interval** #
In elapsed time since the beginning of the measurement period.	**show port** *c.p* **sonet elapsedtime** *hh*:*mm*
By the clock time of the collection interval.	**show port** *c.p* **sonet clocktime** *hh*:*mm*

You can use the **set cli timestamp** command to display current time (GMT) in the CLI prompt.

Use the **show port** *c.p* **sonet interval** # command to display SONET counts for a specified interval.

Use the **show port** *c.p* **sonet elapsedtime** *hh*:*mm* command to display SONET counts for the interval within which the specified time falls, counting time elapsed since the beginning of the measurement period.

Use the **show port** *c.p* **sonet clocktime** *hh*:*mm* command to display SONET counts for the interval within which the specified clock time falls.

show port c.p status

Use the **show port** *c.p* **status** command to display the administrative status, operational status, and last change in operational status for the specified port.

show port c.p statistics

Use the **show port** *c.p* **statistics** command to display statistical counts for the specified port. The counters include the number of (1) octets, normal packets, and multicast packets received and sent, (2) received packets that were discarded, (3) discarded output packets, (4) receive errors and output errors, and (5) packets received with unknown protocols. The error counts sum over all error types.

ATM UNI Ports

show port c.p listvci

Use the **show port** *c.p* **listvci** command to display, for the specified port, a list of ATM UNI PVCs in order of their VCI numbers. The VCI numbers are in Column 3 of the display. If the two virtual connections that form the virtual circuit do not have the same values, the values are displayed on two lines. A displayed (operational) value may differ from the requested value if it has been negotiated down. An asterisk at the beginning of the line means that the circuit is down or has not been created; an uppercase I means that the circuit has been set to inactive manually by means of the **set port** *c.p* **vci** *vci#* **deactivate** command.

show port c.p vci VCI#

Use the **show port** *c.p* **vci** *vci#* command to display, for the specified ATM UNI port, the following attributes of the PVC that uses the specified VCI:

- Source node, port, and VCI
- Source insured rate, insured burst, maximum rate, and maximum burst (operational and administrative)
- Destination operational node, port, VCI, insured rate, insured burst, maximum rate, and maximum burst
- To-net and from-net circuit ID and circuit state, last error reported by ATMM, and cells required
- Counts of cells to the switch with CLP = 0 or 1, a count of cells to the switch with CLP = 0 upon arrival at the port, but forwarded with CLP = 1, and a count of discarded cells

Constant Bit-Rate Ports

show port c.p cbrpvc

Use the **show port** *c.p* **cbrpvc** *pvc#* command to display the following:

- Data bandwidth (cells per second)
- Clock mode
- Target depth and maximum depth of the reassembly buffer
- Status (active, inactive, or deleted), and end-point destination of the specified PVC (chassis ID or alias, port number, and connected PVC number)

If a PVC exists, the display includes the following:

- Service type
- Incoming call ID
- Downstream and upstream state
- Last ATM error and location
- Direction
- MAC endpoint status

Frame Forwarding Ports

show port c.p frameforward

Use the **show port** *c.p* **frameforward** command to display the following frame forwarding attributes of the specified port:

- Source node and port, and destination node and port (operational and administrative)
- Source and destination insured rate, insured burst, maximum rate, and maximum burst (operational and administrative for source, operational for destination)
- To-net and from-net circuit ID and circuit state, last error reported by ATMM, and number of cells required
- Counts of frames and cells to and from the switch with CLP = 0 or 1, and counts of discarded frames and cells

If the VC is unconnected, the operationally requested maximum rate is displayed. If it is connected, the displayed value (which is actually in use) may have been negotiated down.

Frame Relay Ports

show port c.p dlci

Use the **show port** *c.p* **dlci** *dlci#* command to display the following attributes of the specified Frame Relay DLCI:

- Source node, port, and DLCI
- Source insured rate, insured burst, maximum rate, and maximum burst (operational and administrative)
- Destination node, port, and DLCI (operational and administrative)
- Destination operational insured rate, insured burst, maximum rate, and maximum burst
- Local and remote link management interface (LMI) state, to-net and from-net circuit ID and circuit state, last error reported by ATMM, and cells required
- Counts of frames and cells to and from the switch with cell loss priority (CLP) = 0 or 1, and counts of discarded frames and cells.

Port number 1255 refers to the control port (port 255) of the NP in slot 1, and port number 2255 refers to the control port of the NP in slot 2.

show port c.p framerelay

Use the **show port** *c.p* **framerelay** command to display the following Frame Relay attributes:

- Type of active LMI system
- Address length
- Request interval
- Maximum for status query errors
- Status query period
- Maximum supported VCs

- Type of broadcast supported (for example, Uni-cast)
- User polling interval
- Full enquiry interval
- A count of user monitored events,
- The net interface type (for example, NNI)

show port c.p listdlci

Use the **show port** *c.p* **listdlci** command to display a list of FrameRelay PVCs for the port in order of their DLCI numbers.

The DLCI numbers are in Column 3 of the display. If the values specified for the two directions of the circuit are not the same, the values are displayed on two lines. A displayed (operational) value may differ from the requested value if it has been negotiated down. An asterisk at the beginning of the line means that the circuit is down or has not been created; an uppercase I means that the circuit has been set to inactive manually by means of the **set port dlci** *dlci#* **deactivate** command. The **show chassis listdlci** command displays a table for all ports on a node.

Port number 1255 refers to the control port (port 255) of the NP in slot 1, and port number 2255 refers to the control port of the NP in slot 2.

show port c.p listpvc

Use the **show port** *c.p* **listpvc** command to display a list of constant bit-rate (CBR) PVCs for the port in order of their PVC numbers. If the values specified for the two directions of the circuit are not the same, they are displayed on two lines. A displayed (operational) value may differ from the requested value if it has been negotiated down. The **show chassis listpvc** command displays a PVC table for all ports on the specified node.

Internetworking Ports

FDDI Ports

Use the **show port** *c.p* **fddi** commands to display FDDI information. Displayed values include.

- TVX (valid transmit timer)
- TReq (target request time)
- TRT (token rotation time)
- TNeg (negotiated target token rotation time or TTRT)
- T Max. (maximum token rotation time) value
- RMT (ring management)
- UNDA (upstream neighbor duplicate address) flag

For the meanings of these and other displayed items, refer to the specification FDDI SMT X3T9.5 (Rev. 7.3). The arguments of the **show port** *c.p* **fddi** command are given in the following paragraphs.

Note MAC addresses appear in the output of several of the following commands. There is a potential source of confusion regarding their format. FDDI MAC addresses are displayed in MSB form (most significant bit first) and Ethernet MAC addresses in canonical form (least significant bit first). So, for example, Ethernet MAC address 08:00:2B:3C:7F:E2 is displayed as FDDI MAC address 10:00:4D:3C:FE:47.

show port c.p fddi mac

Use the **show port** *c.p* **fddi mac** command to display the following MAC information for this FDDI port:

Station management (SMT) index	Duplicate address test	Error count
MAC index	Requested paths	Lost count
Frame status functions	Downstream port type	Frame error ratio
Maximum capability	SMT address	RMT state
TVX capability	TReq	Duplicate address flag
Available paths	TNeg	UNDA flag
Current path	T Max value	Frame error flag
Upstream number	TVX value	Unit data present
Downstream number	Frame count	Hardware present
Old upstream number	Copied count	Unit data enable flag
Old downstream number	Transmit count	

show port c.p fddi MACcounters

Use the **show port** *c.p* **fddi MACcounters** command to display statistical information about FDDI traffic on this circuit. (The command is not case-sensitive; you can enter it as **MACcounters** or **maccounters**.) The items displayed are MAC index, token count, TVX expirations, not copied count, TRT expirations, ring op count, not copied ratio, and not copied flag.

show port c.p fddi path

Use the **show port** *c.p* **fddi path** *path#* command to display the following information for FDDI Path 1 (primary path) or 2 (secondary path): the SMT index (calculated per port), path index (same as the path number), minimum TVX value, minimum TMax value, and maximum TReq value.

show port c.p fddi aport

Use the **show port** *c.p* **fddi aport** command to display the following information about FDDI Port A in this FDDI circuit: station management (SMT) index, path index, PC type, remote type, connection policy, MAC indicated, current path, requested paths, MAC placement, available paths, PMD type, connection

capabilities, BS flag, failed confidence test count, LER estimate, link error count, LER cutoff, LER alarm, connect state, PCM state, PC withhold, LER flag, hardware present, and action. See the commands **set port** *c.p* **fddi {aport** | **bport**} (in the chapter entitled "The Set Command") for details about these fields.

show port c.p fddi bport

Use the **show port** *c.p* **fddi bport** command to display information about FDDI Port B in this FDDI circuit. See the command **show port** *c.p* **fddi aport** for a list of displayed fields. See the command **set port** *c.p* **fddi {aport** | **bport**} (in the chapter entitled "The Set Command") for details about these fields.

show port c.p fddi smt

Use the **show port** *c.p* **fddi smt** command to display the following FDDI station management (SMT) information: the SMT index, Path index, Minimum TMax value, and Maximum TReq value.

Spanning-Tree Bridge Ports

show port c.p stb

Use the **show port** *c.p* **stb** command to display the bridging state of the specified port (enabled or disabled for bridging), its priority (a value used in the spanning-tree protocol), and the port path cost (the contribution of this port to the path cost of those paths toward the root bridge that pass through it). See also the section on spanning-tree bridge commands **show stb** and **show spt**.

Traffic Filters

show port c.p bcast-limit

Use the **show port** *c.p* **bcast-limit** command to display (1) the default broadcast rate limit that has been set for this port and (2) the number of excess broadcast frames that have been dropped at this port as a result of applying this limit.

show port c.p bflt

Use the **show port** *c.p* **bflt** [*ID*] command to display the filters that are associated with the specified port, plus some statistical counts of filtered traffic. The optional *ID* argument limits the display to the specified filter. The display includes the filter ID, priority, action, and a count of the number of times the NP acted on traffic that matched a filter on this port. The display also includes the ID of any multicast group or traffic profile associated with the filter for this port.

show port c.p ipflt

Use the **show port** *c.p* **ipflt** [*ID*] command to display the filters that are associated with the specified port, plus some statistical counts of filtered traffic. The optional *ID* argument limits the display to the specified filter. The display includes the filter ID, priority, action, and a count of the number of times the NP acted on traffic that matched a filter on this port. The display also includes the ID of any multicast group or traffic profile associated with the filter for this port.

show port c.p ipxflt

Use the **show port** *c.p* **ipxflt** [*ID*] command to display the filters that are associated with the specified port, plus some statistical counts of filtered traffic. The optional *ID* argument limits the display to the specified filter. The display includes the filter ID, priority, action, and a count of the number of times the NP acted on traffic that matched a filter on this port. The display also includes the ID of any multicast group or traffic profile associated with the filter for this port.

show port c.p bflt-def

Use the **show port** *c.p* **bflt-def** command to display the default bridge filter action that has been set for the specified port (drop or forward).

show port c.p ipflt-def

Use the **show port** *c.p* **ipflt-def** command to display the default IP filter action that has been set for the specified port (drop or forward).

show port c.p ipxflt-def

Use the **show port** *c.p* **ipxflt-def** command to display the default IPX filter action that has been set for the specified port (drop or forward).

show port c.p np-deliver

Use the **show port** *c.p* **np-deliver** command to show whether received frames are being delivered to NPs in the network (forward) or not (block).

VLI Information

show port c.p wgrp

Use the **show port c.p wgrp** command to display the ID numbers of the workgroups associated with the specified port (if any), and whether the workgroup list is an include list or an exclude list.

Note The **show** command does not display the mnemonic workgroup names (aliases) maintained by the configuration tool. If you prefer to use the **show port** *c.p* **wgrp** command, you should maintain a list of group IDs and the corresponding mnemonic workgroup names.

Trunk Ports

Information about trunk ports is not available with show port commands, except for virtual path trunk ports (discussed in a subsequent section). Trunk information is available with the **show card** *card#* **peak-cell-rate** command (see “Card Attributes” earlier in this chapter) and the **show chassis listtrunk** command (see “Per-Node (Chassis) Attributes” earlier in this chapter).

show port c.p vpi

Use the **show port** *c.p* **vpi** *vpi#* command to display the virtual path identifier (VPI) for the specified port. The VPI number is set with the **set port** *c.p* **characteristics vpi** command.

SNMP Attributes

show snmp

Use the **show snmp** command to display the value of the read/write community name attribute and the chassis name (host name) of the target node. These are both SNMP attributes.

Spanning-Tree Bridge Attributes

Use the **show spt** and **show stb** command families to display spanning-tree bridge parameters that have been set by the root bridge or by using the **set stb** command or the **set port** *c.p* **stb** commands. (See also the command **show port** *c.p* **stb**.)

show spt

Use the **show spt** command to display the following spanning-tree bridge parameters: designated root bridge address, root path cost, port for lowest cost path, protocol used (for example, IEEE 8021d), maximum age, hello time, forward delay, priority, base bridge address, bridge max age, bridge hello time, bridge forward delay, topology change time, hold time, topology changes, bridge aging time, and the list of bridge ports with the spanning state of each.

The attributes Bridge Max Age, Bridge Hello Time, and Bridge Forward Delay are set by the root bridge; the attributes Maximum age, Hello time, and Forward delay are set with the **set stb** command, and their values take effect only when the present node becomes the root bridge.

show stb

Use the **show stb** commands to display spanning-tree bridge attributes. These attributes can be set with the **set stb** command.

show stb all

Use the **show stb all** command to display all spanning-tree bridge attributes that are displayed in part by each of the other **show stb** commands.

show stb fwd

Use the **show stb fwd** command to display the bridge forwarding table with the following entries: MAC address, static/dynamic, chassis, and interface (card, port).

show stb general

Use the **show stb general** command to display the following bridge parameters: maximum age, hello timer, forward delay, and priority (for the node). The values displayed for the Bridge Max Age, Bridge Hello Timer, and Bridge Forward Delay attributes are those provided by the root bridge.

show stb ports

Use the **show stb ports** command to display a table of all ports enabled for bridging. For each port, the table includes the values of the following parameters: port number, port state, received frames, forwarded frames, and dropped frames.

show stb static

Use the **show stb static** command to display static entries in the bridge forwarding table (see **set stb static** in the chapter entitled "The Set Command"), including the following entries: MAC address, receive port, and allowed transmit ports.

Test and Control System Attributes

show tcs

Use the **show tcs** command family to display hardware information available on a per-card basis through the test and control system (TCS) software. For information on commands available at the TCS hub, see the *LightStream 2020 Hardware Reference and Troubleshooting Guide*.

Note The **show tcs** commands affect *only* the node on which the CLI is running when you execute them, regardless of any target that has been set with the command **set snmp hostname** *name*.

The **show tcs** commands do not work on a Sun workstation. When you start the CLI on a Sun, you see the message "Warning: No TCS available."

---

show tcs card# all

Use the **show tcs** *card#* **all** command to display all card attributes (for the specified card) that are accessible through the use of the TCS (state, config, daughter, paddle, oem, midplane, temperature, voltage, and power). The other arguments show portions of this display.

show tcs card# config

Use the **show tcs** *card#* **config** command family to display card configuration attributes that are accessible through the use of the TCS. The additional arguments that can be used with the **config** argument are described in the following paragraphs.

- Use the **show tcs** *card#* **config all** command to display all the card configuration attributes for the specified card. For an explanation of the display, see the descriptions of the other arguments in the following paragraphs, each of which shows a selected part of this display.
- Use the **show tcs** *card#* **config assembly** command to display the assembly number (the manufacturing part number) of the specified card.
- Use the **show tcs** *card#* **config postcode** command to display the revision number of the power-on self-test (POST) software on the specified card.
- Use the **show tcs** *card#* **config serialnum** command to display the serial number of the specified card.
- Use the **show tcs** *card#* **config slavecode** command to display the version number of the TCS slave on the specified card.
- Use the **show tcs** *card#* **config type** command to display the card type. This display uses the following abbreviations.

Abbreviation	Description
S1	Switch card 1

Abbreviation	Description
S2	Switch card 2
N1	Network processor (NP) card 1
L1	Low-speed line card 1
M1	Medium-speed line card 1
P1	Packet line card 1
C1	Cell line card 1

show tcs card# daughter

Use the **show tcs** *card#* **daughter** command family to display daughter card attributes. The additional arguments that can be used with the **daughter** argument are described in the following paragraphs.

- Use the **show tcs** *card#* **daughter all** command to display both daughter card attributes (assembly and serial number). The other *parameter2* arguments each display just one of these attributes.
- Use the **show tcs** *card#* **daughter assembly** command to display the daughter card assembly number (part number).
- Use the **show tcs** *card#* **daughter serialnum** command to display the daughter card serial number.

show tcs card# midplane

Use the **show tcs** *card#* **midplane** command family to display midplane attributes of the specified switch card that are accessible using TCS. The *card#* argument must be **sa** or **sb**. The additional arguments that can be used with the **midplane** argument are described in the following paragraphs.

- Use the **show tcs** *card#* **midplane all** command to display all three TCS midplane attributes (assembly number, node address, and serial number). The other arguments of this command each display just one attribute.
- Use the **show tcs** *card#* **midplane assembly** command to display the midplane assembly number (part number).
- Use the **show tcs** *card#* **midplane nodeaddress** command to display the midplane node address.
- Use the **show tcs** *card#* **midplane serialnum** command to display the midplane serial number.

show tcs card# oem

Use the **show tcs** *card#* **oem** command family to display attributes for the portion of the access card that is reserved for Cisco's development partners. The additional arguments that can be used with the **oem** argument are described in the following paragraphs.

- Use the **show tcs** *card#* **oem all** command to display both of the access card attributes that are accessible using TCS (the assembly number and serial number). The other arguments of this command each show just one part of this display.
- Use the **show tcs** *card#* **oem assembly** command to display the access card assembly number (part number).
- Use the **show tcs** *card#* **oem serialnum** command to display the access card serial number.

show tcs card# paddle

Use the **show tcs** *card#* **paddle** commands to display TCS-accessible attributes for the Cisco portion of the access (paddle) card. The additional arguments that can be used with the **paddle** argument are described in the following paragraphs.

- Use the **show tcs** *card#* **paddle all** command to display both TCS access (paddle) card attributes (assembly and serial number). The other arguments with the **show tcs** *card#* **paddle all** command each show just one part of this display.
- Use the **show tcs** *card#* **paddle assembly** command to display the access (paddle) card assembly number (part number).
- Use the **show tcs** *card#* **paddle serialnum** command to display the access (paddle) card serial number.

show tcs card# power

Use the **show tcs** *card#* **power** command to display on/off power state of the specified card.

show tcs card# state

Use the **show tcs** *card#* **state** command to display the status of the following card attributes that are accessible using TCS: power supply, temperature, clock, POST, XILINX load, application load, access (paddle) cards and overrides, flash memory, CP POST, application software, card, power (TCS VCC, VCC, VPP, and SCSI), temperature (top, and bottom if applicable), board initialization, flash initialization, and TCS HUB.

show tcs card# temperature

Use the **show tcs** *card#* **temperature** command to display TCS-accessible temperature readings for the top region of the specified card (and the bottom region of the card, if applicable). The display includes the warning and shutdown values for each temperature reading. The command **show card** *card#* **hardware** also displays the temperature readings, but not the warning and shutdown values.

show tcs card# voltage

Use the **show tcs** *card#* **voltage** command to display TCS-accessible voltage readings on the specified card for TCS VCC, VCC, VEE (or SCSI for NP), and VPP voltage. The display includes the normal voltage ranges. The command **show card** *card#* **hardware** also displays the voltage readings, but not the normal ranges.

Traffic Profiles

Use the **show tprof** command to display information about traffic profiles.

show tprof

Use the **show tprof** command to display traffic profiles created with the **define tprof** command (described in the chapter entitled “The Define and Delete Commands”). All command arguments are optional. Without any argument, the command displays all configured traffic profiles.

show tprof ID

Use the **show tprof** *ID* command to display information only about the specified traffic profile.

show tprof default

Use the **show tprof default** command to display the default traffic profile values. If no traffic profile is explicitly configured for a port, the default traffic profile values take effect on that port.

Example

The following example shows how the **show tprof** command can be used without any argument to display all currently defined traffic profiles on the system:

```
*cli> show tprof

Traffic
Profile
ID      Service-Type     Max R     Max B      Ins R    Ins B  S Scl  Xmt Pri
-----   ------------     -----     -----      -----    -----  -----  -------
1          Insured    Default     32000          0        0      1      0
2          Insured     122000     32000          0        0      1      0
7          Insured      77000     32000          0        0      1      0
16      Guaranteed      64000     32000      32000    30000      1      0
cli>
```

For each traffic profile, the display shows the ID, service type, maximum rate, maximum burst, insured rate, insured burst, secondary scale, and transmit priority. Rates are in bits per second, bursts are in bytes. (Additional detail about rates and bursts is given in the description of the **define tprof** command in the chapter entitled "The Define and Delete Commands.")

The above example shows default as the value of the Max Rate parameter. The command **define tprof** *ID* **max-rate default** sets the Max Rate value. When the traffic profile is assigned to the port, the software determines the default maximum rate for the type of connection by applying the following rules:

- For multicast circuits, 500 Kbps
- For unicast circuits, the calculated value for the smallest bottleneck in the circuit path, up to a maximum of 120 Mbps (for FDDI) or 12 Mbps (for Ethernet)

Omitting some detail, the smallest bottleneck is basically the smallest physical transmission capacity found along the path of the circuit, including the output edge. The output of the **show tprof default** command explains this point.

Trap Status

You can set traps with the **set trap** commands. Traps issue messages about objects and processes in the network. Use the **show trap** command family to display the state of these trap settings.

trapspec

In the following command descriptions, *trapspec* stands for a trap name or a trap number. See the *LightStream 2020 Traps Reference Manual* for trap names and numbers. You can specify a name for a group of traps previously defined in the cli.groups file. You can also specify a range of trap numbers, but doing so is not recommended, as you could easily disrupt the system by flooding it with traps.

The *trapspec* arguments are used to specify which traps are to be displayed. The arguments and their meanings are given in the following list.

trapname	The trap identified by its trap name (see the *LightStream 2020 Traps Reference Manual*)
trapgroup	The traps listed in the definition of the name *trapgroup* given in the cli.groups file
trap#	The trap identified by *trap#*
trap#-trap#	The set of traps identified the range of traps *trap# - trap#*

show trap

Use the **show trap** command family to display the state of traps, either system-wide (the default) or by process.

See the *LightStream 2020 Traps Reference Manual* for information about LS2020 traps.

Note The **show trap** commands affect *only* the node on which the CLI is running when you execute them, regardless of any target that has been set with the command **set snmp hostname** *name*.

Syntax

```
show trap {[global] | pid {PID#|PIDname}} trapspec
        [ {[global] | pid {PID#|PIDname}} trapspec ...]
```

show trap [global]

Use the command **show trap** [**global**] *trapspec* to display traps from all processes, system wide. The default is to display the specified traps for all processes system-wide, but you may explicitly specify this behavior with the optional **global** argument. (You use the **show trap pid** {*PIDname* | *PID#*} *trapspec* command to display traps on a per-process basis.) The *trapspec* argument is a trap name or a trap number as described under the preceding heading “trapspec.”

show trap pid

Use the **show trap pid** {*PIDname* | *PID#*} *trapspec* command to display traps issued by a particular process. The process ID may be either a PID number or a process alias.

- Use the command **show trap pid** *PID# trapspec* to display traps from the process whose process ID is *PID#*.
- Use the command **show trap pid** *PIDname trapspec* to display traps from the process whose alias is *PIDname*.

These commands are of interest primarily to support personnel and developers. The *trapspec* argument is a trap name or a trap number as described under the preceding heading “trapspec.”