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Stinger™

Reference

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Contents

About This Guide

What is in this guide

This guide provides an alphabetic reference to all the Stinger unit profiles, parameters, and commands and details the settings and options you can specify.

Note: This manual describes the full set of features for Stinger units running True Access™ Operating System (TAOS) software version 9.0. Some features might not be available with earlier versions or specialty loads of the software.

⚠️ **Warning:** Before installing your Stinger unit, be sure to read the safety instructions in the *Edge Access Safety and Compliance Guide*. For information specific to your unit, see the "Safety-Related Physical, Environmental, and Electrical Information" appendix in the *Getting Started Guide* for your Stinger unit.

What you should know

This guide is intended for the person who configures and maintains the Stinger unit. To use it effectively, you must have a basic understanding of Stinger unit security and configuration and be familiar with authentication servers and networking concepts.

Documentation conventions

Following are the special characters and typographical conventions that might be used in this manual:

Convention	Meaning
Monospace text	Represents text that appears on your computer's screen, or that might appear on your computer's screen.
Boldface monospace text	Represents characters that you enter exactly as shown (unless the characters are also in *italics*—see *Italics*, below). If you could enter the characters but are not specifically instructed to, they do not appear in boldface.
Italics	Represent variable information. Do not enter the words themselves in the command. Enter the information they represent. In ordinary text, italics are used for titles of publications, for some terms that would otherwise be in quotation marks, and to show emphasis.

Convention	Meaning
[ ]	Indicate an optional argument you might add to a command. To include such an argument, type only the information inside the brackets. Do not type the brackets unless they appear in boldface.
|	Separates command choices that are mutually exclusive.
>	Points to the next level in the path to a parameter or menu item. The item that follows the angle bracket is one of the options that appear when you select the item that precedes the angle bracket.
Key1-Key2	Represents a combination keystroke. To enter a combination keystroke, press the first key and hold it down while you press one or more other keys. Release all the keys at the same time. (For example, Ctrl-H means hold down the Control key and press the H key.)
Press Enter	Means press the Enter, or Return, key or its equivalent on your computer.
Note:	Introduces important additional information.
Caution:	Warns that a failure to follow the recommended procedure might result in loss of data or damage to equipment.
Warning:	Warns that a failure to take appropriate safety precautions might result in physical injury.
Warning:	Warns of danger of electric shock.

Stinger documentation set

The Stinger documentation set consists of the following manuals:

- **Read me first:**

    - *Edge Access Safety and Compliance Guide*. Contains important safety instructions and country-specific information that you must read before installing a Stinger unit.

    - *TAOS Command-Line Interface Guide*. Introduces the TAOS command-line environment and shows you how to use the command-line interface effectively. This guide describes keyboard shortcuts and introduces commands, security levels, profile structure, and parameter types.

- **Installation and basic configuration:**

  – *Getting Started Guide* for your unit. Shows how to install your Stinger chassis and hardware. This guide also shows you how to use the command-line interface to configure and verify IP access and basic access security on the unit, and how to configure Stinger control module redundancy.

  – For each Stinger line interface module (LIM) and trunk module, an individual guide describes the module's features and provides instructions for configuring the module and verifying its status.

    Stinger ADSL 24-Port Line Interface Module (LIM) Guide
    Stinger ADSL 48-Port G.lite Line Interface Module (LIM) Guide
    Stinger Copper Loop Test (CLT) Module Guide—includes operating instructions
    Stinger DS3-ATM Trunk Module Guide
    Stinger E3-ATM Trunk Module Guide
    Stinger HDSL2 32-Port Line Interface Module (LIM) Guide
    Stinger IDSL 32-Port Line Interface Module (LIM) Guide
    Stinger OC3-ATM Trunk Module Guide
    Stinger SDSL 48-Port Line Interface Module (LIM) Guide
    Stinger T1 and E1 Modules Guide

- **Configuration:**

  – *Stinger ATM Configuration Guide*. Describes how to use the command-line interface to configure Asynchronous Transfer Mode (ATM) operations on a Stinger unit. The guide explains how to configure permanent virtual circuits (PVCs), and shows how to use standard ATM features such as quality of service (QoS), connection admission control (CAC), and subtending.

  – *Stinger Private Network-to-Network Interface (PNNI) Supplement*. Provides quick-start instructions for configuring PNNI and soft PVCs (SPVCs), and describes the related profiles and commands in the Stinger command-line interface.

  – *Stinger SNMP Management of the ATM Stack Supplement.* Describes SNMP management of ATM ports, interfaces, and connections on a Stinger unit to provide guidelines for configuring and managing ATM circuits through any SNMP management utility.

  – *TAOS RADIUS Guide and Reference*. Describes how to set up a TAOS unit to use the Remote Authentication Dial-In User Service (RADIUS) server and contains a complete reference to RADIUS attributes.

- **Administration and troubleshooting:**

  – *Stinger Administration Guide*. Describes how to administer the Stinger unit and manage its operations. Each chapter focuses on a particular aspect of Stinger administration and operations. The chapters describe tools for system management, network management, and Simple Network Management Protocol (SNMP) management.

- **Reference**:

  – *Stinger Reference* (this manual). An alphabetic reference to Stinger profiles, parameters, and commands.

  – *TAOS Glossary.* Defines terms used in documentation for Stinger units.

Related publications

The following books are available in technical bookstores.

- *Routing in the Internet*, by Christian Huitema. Prentice Hall PTR, 1995. Recommended for information about IP, CIDR, IP multicast, and mobile IP.

- *SNMP, SNMPV2 and RMON: Practical Network Management*, by William Stallings. Addison-Wesley, 1996. Recommended for network management information.

- *TCP/IP Illustrated*, volumes 1&2, by W. Richard Stevens. Addison-Wesley, 1994.

Stinger Command Reference

<div style="text-align: right">

1

</div>
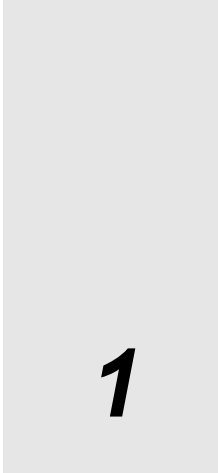
The information contained here is designed for quick reference, and does not include tutorials. All commands are listed alphabetically. For an overall alphabetic listing, see the general table of contents.

You can display a usage summary for any command by entering a question mark and the name of the command:

```
admin> ? command-name
```

For an alphabetic list of commands, just enter a question mark:

```
admin> ?
```

The command line accepts a maximum of 80 characters, including the prompt.

Note: If the list of commands displayed as output does not include all of the commands described in this chapter, you might need to authenticate a User profile that has more extensive permissions. For details, see "Auth" on page 1-12.

?

Description: Displays a list of all available commands, or help text about a specific command. A list of all available commands also shows the permission level required for the use of each command.

Permission level: User

Usage: **?** [-a]|[*command-name*]

Option	Description
-a	List all commands. (Without this option, the list includes only commands authorized by the current User profile.)
command-name	Display information about the specified command.

Example: To display a list of commands authorized for your current login:

```
admin> ?
?                              ( user )
alarm                          ( system )
arptable                       ( system )
atmInternalLines               ( system )
atmsig                         ( system )
atmtrunkreset                  ( diagnostic )
AtmTrunks                      ( system )
```

```
atmvccstat                    ( system )
atmvcl                        ( system )
atmvcx                        ( system )
atmvpl                        ( system )
atmvpx                        ( system )
auth                          ( user )
briChannels                   ( system )
cat                           ( system )
clear                         ( user )
cleval                        ( system )
clock-source                  ( diagnostic )
clr-history                   ( system )
cltActivate                   ( system )
cltCmd                        ( system )
[More? <ret>=next entry, <sp>=next page, <^C>=abort]
```

To display help text about a command:

```
admin> ? dir
dir                    list all profile types
dir profile-type       list all profiles of the specified type
dir profile-type profile-index list the specified profile
instance
```

Dependencies: The current security level is set by the current User profile and determines which commands are displayed in response to the ? command. If the current User profile does not have sufficient privileges to execute a command, that command is not displayed unless you include the −a option. By default, commands that go with the current User security level are always displayed. For details, see "Auth" on page 1-12.

See Also: Help, Auth

Alarm

Description: Enables user to acknowledge, show, and clear alarms.

Permission level: System

Usage: alarm [-a | -c | -s] *address*

Argument	Description
-a	Acknowledge alarm
-c	Clear alarm
-s	Show Alarm. Lists the alarms, the address of the device that has the alarm condition and the status of the alarm.
<address>	[shelf slot item] If unspecified then action is for all. Default values used for unspecified items

Example:

```
admin> alarm -s

        Type            Address        State

 Secondary CM Down      -- -- --       Active

 Line Down            {  1 17  1 }     Active

 Line Down            {  1 17  2 }     Active

 Line Down            {  1 18  1 }     Active

 Line Down            {  1 18  2 }     Active
```

See Also: Alarm-Stat (profile), Alarm-State

Aliastbl

Description: Displays values from the internal Asynchronous Transfer Mode (ATM) alias table.

Permission level: System

Example:

```
admin> aliastbl

Name Address
node-id-1
60:a0:47:41:00:31:00:31:00:31:00:31:00:00:c0:7b:8e:30:92:00
node-addr-1
47:41:00:31:00:31:00:31:00:31:00:31:00:00:c0:7b:8e:30:92:00
peergrp-id-1
60:47:41:00:31:00:31:00:31:00:31:00:31:00
```

ARPtable

Description: Displays or modifies the Stinger unit Address Resolution Protocol (ARP) table. Each entry in the ARP table associates a known IP address with a physical address. For remote IP addresses, the Stinger unit can use the ARP table to respond with its own MAC address to ARP requests.

Permission level: System

Usage: arptable [-a *IP_address MAC_address*]|
[-d *IP_address*]|[-f]

Example:

Option	Description
-a *IP_address MAC_address*	Add an ARP table entry for the device with the specified IP address and MAC address.
-d *IP_address*	Delete the ARP table entry for the device at the specified IP address.
-f	Clear the ARP table.

Example: To display the ARP table:

```
admin> arptable

IP Address MAC Address    Type  IF   Retries/Pkts/RefCntTimestamp
10.103.0.2      00:C0:7B:7A:AC:54   DYN   0      0/0/552        22760
10.103.0.220    00:C0:7B:71:83:02   DYN   0      0/0/2791       22760
10.103.0.1      08:00:20:7B:24:27   DYN   0      0/0/4296       22811
10.103.0.8      00:00:0C:05:B3:A2   DYN   0      0/0/6493       23058
10.103.0.7      00:00:0C:76:58:4E   DYN   0      0/0/6572       23233
10.103.0.49     00:C0:80:89:19:95   DYN   0      0/0/397        23208
```

The ARP table displays the following information:

Column	Description
IP Address	The address contained in ARP requests.
MAC Address	The MAC address of the host.
Type	How the address is learned, that is, dynamically (DYN) or by specification of a static route (STAT).
IF	The interface on which the Stinger unit receives the ARP request.
Retries	The number of retries needed to refresh the entry after it times out.
Pkts	The number of packets sent out to refresh the entry after it times out.
RefCnt	The number of times the Stinger unit consults the entry.
Time Stamp	The number of seconds since the system has come up. The Stinger unit updates this column every time an ARP entry is refreshed.

To add an ARP table entry for a device with the physical address 00A024A61535 at IP address 10.9.8.20:

```
admin> arptable -a 10.9.8.20 00A024A61535
```

See Also: NSlookup

ATMinternallines

Description: Displays statistics for the Asynchronous Transfer Mode (ATM) internal lines.

Permission level: System

Usage: atmInternalLines -[a | d | f | u]

Option	Description
-a	Show (a)ll lines
-d	Show (d)isabled lines
-f	Show all (f)ree lines
-u	Show in-(u)se lines

Example:

```
techpubs> atminternallines -a
All ATM Internal lines:
                            (dvOp     dvUpSt    dvRq     sAdm      nailg)
{    1 17  2 }              (Up       Idle      UP       UP        00802)
```

The data displayed includes the physical address of each line and the following information:

Column	Description
dvOp	The current operational state of the line: • Down indicates that the line is in a nonoperational state. • Up indicates that the line is in normal operations mode.
dvUpSt	The status of the line in normal operations mode: • Idle indicates that no call is on the line. • Active indicates that the line is handling a call.
dvRq	The required state of the line: • Down indicates that the line is required to be nonoperational. • Up indicates that the line is required to be in normal mode.
sAdm	The desired administrative state of the line: • Down specifies that the line should terminate all operations and enter the down state. • Up specifies that the line should come up in normal operations mode. The actual state of the line can differ from the desired state, as when a device is powering up, or you change the desired state on a running slot. Changing the desired state does not automatically change a line to the desired state. It indicates that an operation has been initiated that should changethe Stinger unit to the state desired.
nailg	The dedicated (nailed) group to which the line is assigned.

See Also: ATMsig, ATM-If-Config (profile), ATM-Internal (profile), ATM-Options

ATMsig

Description: Display signaling statistics for an Asynchronous Transfer Mode (ATM) connection.

Permission level: System

Usage: `atmsig [[-i interface]|[-c interface]|-p| slot port]]`

Option	Description
`-i interface>`	Show ATM signaling stats by interface.
`-p slot port`	Show ATM signaling stats by slot and port.
`-c interface`	Clear ATM signaling statistics by interface.

Example:
admin> atmsig -i 11
Physical Address = { 1 17 1 }
Interface = 11
SSCOP Connections Events = 0
SSCOP Errored PDUs = 0
Received Call Setup Attempts = 0
Transmitted Call Setup Attempts = 7
Received Unavailable Routes = 0
Transmitted Unavailable Routes = 0
Received Unavailable Resources = 0
Transmitted Unavailable Resources = 0
Received Called Party Rejects = 0
Transmitted Called Party Rejects = 0
Received Msg Errors = 0
Transmitted Msg Errors = 0

ATMtrunkmgr

Description: Enables/disables debugging statistics for the Asynchronous Transfer Mode (ATM) trunk modules.

Permission level: System

Usage: `atmtrunkmgr [-tparam|-g| param ]`

Option	Description
`-t`	Toggle debug level
`-g`	Debug test driver - call GetChansByNGandProf

`params`	Number to specify debug level

Example:

```
incubus> atmtrunkmgr -t 1
current atmtrunkmgr debug level =  1

incubus> atmtrunkmgr -t 2
current atmtrunkmgr debug level =  2
```

See Also: ATMtrunks, ATMVCL, ATMVCX, ATMVPL

ATMtrunkreset

Description: Resets the unit's Trunk Modules.

Permission level: Diagnostic

Usage: `atmtrunkreset [-17|-18]`

Option	Description
`null`	Display options.
-17	Reset TM 1.
-18	Reset TM 2.

See Also: ATMtrunkreset

ATMtrunks

Description: Indicates the status of the ATM trunk modules on the Stinger unit.

Permission level: System

Usage: `AtmTrunks -[ a | d | f | u ]`

Option	Description
-a	show (a)ll ATM trunks
-d	show (d)isabled trunks
-f	show all (f)ree trunks
-u	show in-(u)se trunks

Example:

```
testbox>atmtrunks -a

All OC3 ATM trunks:
OC3 Lines           m(dvOp    dvUpSt   dvRq     sAdm     nailg)
Line    {    1 17  1 }(Down    Idle     UP       UP       00801)
Line    {    1 17  2 }(Up      Idle     UP       UP       00802)

All DS3 ATM trunks:
DS3 Lines(            dvOp     dvUpSt   dvRq     sAdm     nailg)
Line    {    1 18  1 }(Up      Idle     UP       UP       00851)
Line    {    1 18  2 }(Down    Idle     UP       UP       00852)
```

```
All E3 ATM trunks:
E3 Lines                (dvOp   dvUpSt  dvRq    sAdm    nailg)
```

See Also: ATMtrunkmgr, ATMVCCstat

ATMVCCstat

Description: Displays active Asynchronous Transfer Mode (ATM) virtual channel connections (VCCs) in the format slot/port/virtual path identifier (VPI)/virtual channel identifier (VCI). The command also displays the receive (Rx) and transmit (Tx) cell counts for the ATM VCCs.

Permission level: System

Usage: atmvccstat

Example: admin> **atmvccstat**

```
2 Connections                      x Status
0002 17-1-48                       x Serial number: 10048257
Version: 9.0-126e0
0001 17-1-47                       x
                                   x Rx Pkt:          16906
                                   x Tx Pkt:          4488
                                   x   Col:               5
                                   x
06/14/2024      02:49:15 Up: 0  days,     00:39:00
17/ 2/ 0/               Rx:125    Tx:322
17/ 1/ 0/               Rx:401    Tx:117
17/ 2/ 0/               Rx:54     Tx:32
```

ATMVCL

Description: Display Asynchronous Transfer Mode (ATM) virtual channel links (VCLs).

Permission level: System

Usage: atmvcl [-c|-a|-s *slot*|-p *slot port*|-d *slot port vpi vci*] [grep|*argument*]

Option	Description
-c	Show only a count of the different types of calls. Can be used with -a (default), -s , or -p options.
-a	Show all ATM virtual channel links (VCLs).
-s *slot*	Show ATM VCLs by slot.
-p *slot port*	Show ATM VCLs by slot and port.
-d *slot port vpi vci*	Show detailed ATM VCL info.
|grep *argument*	Searches for the value argument. See the Grep command.

Example:

```
admin> atmvcl -a
Intf    Slot Port Vpi Vci   XConnID Kind OStatus
15      18 1      0   1000  2        pvc  up
15      18 1      0   1001  3        pvc  up
15      18 1      0   1002  9        pvc  up
15      18 1      0   1003  4        pvc  up
15      18 1      0   1004  5        pvc  up


.....
admin> atmvcl -s 3

Intf Slot Port Vpi Vci XConnID Kind OStatus
65      3 1      0   41   2        pvc  up
66      3 2      0   41   3        pvc  up
67      3 3      0   41   9        pvc  up
68      3 4      0   41   4        pvc  up
69      3 5      0   41   5        pvc  up
70      3 6      0   41   6        pvc  up
71      3 7      0   41   7        pvc  up
72      3 8      0   41   8        pvc  up
...
admin> atmvcl -d 3 1 0 41

Physical Address = { 1 3 1 }

Interface = 65
VCC Endpoint = yes
Vpi = 0
Vci = 41
Admin Status = down
Oper Status = up
Rx Traffic Descr Index = 1
Tx Traffic Descr Index = 1
Conn Kind = pvc
Cast Type = p2p
AAL Type = aal5
```

```
AAL5 Rx SDU Size = 9188
AAL5 Tx SDU Size = 9188
AAL5 Encap Type = llcEncapsulation
...
admin> atmvcl -a | grep 41


Intf Slot Port Vpi Vci XConnID   Kind      OStatus
116        6   1   0   41          23 spvcI up
120        6   3   0   41           0 pvc   down

<grep> Found 2 line(s) matching search criteria

Totals:        Up   Down
PVC            2    5
SVC In         0    0
SVC Out        13   0
SPVC Initiator 13   0
SPVC Target    0    0
Invalid        0
```

See Also: ATMtrunkreset, ATMVCX, ATMVPL, ATMVPX, Grep

ATMVCX

Description: Displays Asynchronous Transfer Mode (ATM) virtual channel cross connects.

Permission level: System

Usage: atmvcx [-a |-s *slot* |-p *slot port*]

Option	Description
-a	Show all ATM virtual channel cross connects.
-s *slot*	Show ATM virtual channel cross connects by slot.
-p *slot port*	Show ATM virtual channel cross connects by slot and port.

Example:

techpubs> **atmvcx -a**

		Low					High				
Profile	Kind	Intf/Slot/Port/	VPI/	VCI/	OStatus	Intf/Slot/Port/	VPI/	VCI/	OStatus
12-6-to-8-1	pvc	71 12 6	0	46	down	391 17 1	0	206	down

....

See Also: ATMtrunkreset, ATMVCL, ATMVPL, ATMVPX

ATMVPL

Description: Display statistics about the Asynchronous Transfer Mode (ATM) virtual pipe links (VPLs).

Permission level: System

Usage: `atmvpl [-a|-s slot |-p slot port|-d slot port vpi]`

Option	Description
`-a`	Show all ATM VPLs.
`-s slot`	Show ATM VPLs by slot.
`-p slot port`	Show ATM VPLs by slot and port.
`-d slot port vpi`	Show detailed ATM VPL info.

Example:

```
admin> atmvpl -a
Intf Slot Port Vpi XConnID Kind OStatus
15 18 1 10 1 pvc up
16 18 2 20 1 pvc up
...
admin> atmvpl -s 18
Intf Slot Port Vpi XConnID Kind OStatus
15 18 1 10 1 pvc up
16 18 2 20 1 pvc up
...
admin> atmvpl -d 18 1 20
Physical Address = { 1 18 2 }
Interface = 16
Vpi = 20
Oper Status = up
Rx Traffic Descr Index = 1
Tx Traffic Descr Index = 1
Conn Kind = pvc
Cast Type = p2p
Cross Connect ID = 1
```

See Also: ATMVCL, ATMVCX, ATMVPX

ATMVPX

Description: Displays Asynchronous Transfer Mode (ATM) cross-connects.

Usage: `atmvpx [-a|-s slot |-p slot port ]`

Option	Description
-a	Show all ATM VP cross connects.
-s *slot*	Show ATM VP cross connects by slot.
-p *slot port*	Show ATM VP cross connects by slot and port.

See Also: ATMVCL, ATMVCX, ATMVPL

Auth

Description: Authenticates your current login by applying a specified User profile. Use this command to increase or decrease the permissions of the current login. For information about permission levels in User profiles, see the description of the User profile.

Permission level: User

Usage: auth *user-name*

Variable	Description
user-name	Authenticate the specified User profile.

Example: To login as Joe:

```
admin> auth joe
Password:
```

If you supply the proper password for the User profile you've specified, the Stinger unit enables the privileges in that profile and then displays the system prompt again. Note that the User profile may specify its own system prompt, which is a useful way to flag certain permission levels. For example:

```
admin> auth admin
Password:
```

If you supply the wrong password at the prompt, you'll see the following message:

```
Login incorrect
User:
```

Enter the user name again to display the Password prompt.

See Also: Whoami

BRIchannels

Description: Display statistics for Basic Rate Interface (BRI) channels.

Permission level: System

Usage: briChannels -[a|d|c|i]

Option	Description
-a	Show all (a)vailable channels
-d	Show (d)isabled channels
-c	Show all possible (c)hannels
-i	Show (i)n-use channels

Example:

```
techpubs> brichannels -a
BRI channels available for use:
                (dvOp  dvUpSt  dvRq  sAdm nailg)
```

See Also: IDSL (profile)

Cat

Description: Prints a file to the screen.

Permission level: System

Usage: cat [socket[/*pathName*]]]

Variable	Description
socket	Specify the filename
socket /*pathname*	When not residing in the directory containing the file, specify the filename and the path.

Clear

Description: Clears the terminal session screen and places the system prompt at the top row of the VT100 window used in the terminal session display.

Permission level: User

Usage: clear [-r]

Option	Description
-r	Reset the terminal session's VT100 display attributes.

Cleval

Description: Shows whether the call logging 30-day evaluation license is granted.

Permission level: System

Usage: `cleval`

Example:

```
techpubs> cleval ?
This machine is already licensed for Network Management and it
is capable of emitting call logging records
```

Clock-Source

Description: Displays the current clock-source settings for the system. If a line is specified as the master clock source, it provides the source of timing information for synchronous connections. The clock allows the sending device and the receiving device to determine where one block of data ends and the next begins. If multiple lines specify that they are eligible to be the clock source, you can assign clock-source priority among multiple lines. In the output of the Clock-Source command, the value 1 signifies the highest priority. For information about setting clock-source priority, see the *Stinger Getting Started Guide*.

The Clock-Source command lists only currently eligible local clock sources. Sources with Layer 2 up, which are preferred, are marked with an asterisk. In addition, a message is logged whenever the system clock source changes. You must first execute the Open command to open a session with the module.

Permission level: Diagnostic

Usage: `clock-source`

Example: The Clock-Source command on the shelf controller shows the master clock's module line number:

```
admin> clock-source
Master line: 1
Source List:
        Source: line 1 Available*        priority: 2
        Source: line 3 Available         priority: 2
```

On the modules, the Clock-Source command uses one-base indexes for the module's lines. For example, to open a session with a DS3 module and display its clock-source settings:

```
admin> open 1 1
```

```
ds3-1/2> clock-source
Master line: 1
Source List:
        Source: line 1 Available*        priority: 2
        Source: line 3 Available         priority: 2
```

Following are examples of log messages generated for clock-source transitions:

```
LOG notice, Shelf 1, Controller, Time: 19:44:39--
 Master clock source changed to slot-1/8 line 1
```

```
LOG notice, Shelf 1, Controller, Time: 10:34:56--
 Master clock source changed to local oscillator
```

See Also: Open, Clock-Priority, Clock-Source

Clr-History

Description: Clears the fatal-error history log.

Permission level: System

Usage: clr-history

Example: To display the fatal-error history log, enter the Fatal-History command:

admin> **fatal-history**

```
OPERATOR RESET:  Index:  99  Revision: 1.0F Controller
        Date: 09/20/1998.        Time: 16:56:01
        Reset from unknown, user profile super.
OPERATOR RESET:  Index:  99  Revision: 1.0F  Controller
        Date: 09/24/1998.        Time: 11:56:10
        Reset from unknown, user profile super.
```

To clear the log:

admin> **clr-history**

See Also: Fatal-History

CLTactivate

Description: Enables the Copper Loop Test (CLT).

Permission level: System

Usage: Two syntaxes are used with this command

Syntax 1: cltActivate *slot port*[*cltSlot*[*mode*[*terminal*]]]

Syntax 2: cltActivate *external-loop*

In syntax 2 you use the cltActivate *external-loop* command to set the CLT module to external-loop access mode. In this usage the command has no arguments. The CLT slot is detected automatically and the access mode is set to looking-out.

Example: Using syntax 1:

techpubs> **cltactivate 1 4**

No PSM module in Rear slot 1

Note: See the *Stinger Copper Loop Test (CLT) Module Guide* for a detailed discussion of this command and all its parameters.

See Also: CLTdeactivate, CLTcmd

CLTcmd

Description: Runs a copper loop test (CLT).

Permission level: System

Usage: See the *Stinger Copper Loop Test (CLT) Module Guide* for a detailed discussion of this command and all its parameters.

CLTdeactivate

Description: Disables the Copper Loop Test (CLT).

Permission level: System

Example: `cltDeactivate[ cltSlot]`

techpubs> **cltdeactivate 1 4**

No PSM module in Rear slot 1

Note: See the *Stinger Copper Loop Test (CLT) Module Guide* for a detailed discussion of this command and all its parameters.

See Also: CLTactivate, CLTcmd, CLT-Command (profile), CLT-Result (profile)

Connection

Description: Specifies that the upper-left portion of the status window displays connection status information. If the status window is not already displayed, this command opens it with the connection status information displayed.

Permission level: System

Usage: connection

Example: An administrator opens a window with connection status information displayed:

admin> **connection**

```
 2 Connections              Status
001 tomw TCP 1/7/14 19200   Serial number: 6201732    Version: 1.0F
002 timl TCP  1/7/3  56000
                             Rx Pkt:    11185897
                             Tx Pkt:       42460
                               Col:         129

                            12/27/1998 12:20:15  Up:    3 days, 21:47:32

                            M: 29 L: info Src: shelf-1/controller




                                   Issued: 16:48:02, 09/27/1998
```

[Next/Last Conn: <dn/up arw>, Next?Last Page: <pg dn/up>, Exit: <esc>]

For each active connection, the displays includes a line that shows the user or station name, type of connection, the shelf, the line, and the channel on which the call was placed or received, and the bandwidth or baud rate. You can press the Down-Arrow key to scroll through the list of active connections.

To display a prompt below the status window, press the Escape key. To close the status window, enter the Status command:

```
admin> status
```

See Also: List, Log, View

Date

Description: Displays or sets the Stinger unit system date and time. The date and time are stored in the Timedate profile.

Permission level: Update

Usage: `date [yymmddhhmm]`

Variable	Description
yy	A two-character representation of the current year
mm	A two-character representation of the current month
dd	A two-character representation of the current day
hh	A two-character representation of the hour
mm	A two-character representation of the minute

Example: To set the Stinger unit system date and time to noon, December 31, 2001:

```
admin> date 0112311200
```

See Also: Time, Timedate (profile), Time-Stamp

Debug

Description: Enables or disables diagnostic output.

Permission level: Diagnostic

Usage: `debug on | off`

Syntax element	Description
on	Enables diagnostic output.
off	Disables diagnostic output.

Example: To enable diagnostic output:

```
admin> debug on
Diagnostic output enabled
admin> FRMAIN: Setting timer DCE
FRMAIN: time 88121200, mkstatus type 1, seq (026,025)
```

Delete

Description: Permanently deletes a profile from local storage. Any flash space that was used by the profile becomes available to the system.

Permission level: Update

Usage: `delete [-f]` *profile-type* `[`*profile-index*`]`

Argument	Description
-f	Delete without prompting for confirmation.
profile-type	A type of profile, as listed by the Dir command.
profile-index	The index of the specified profile type. Not all profile types require an index.

Example: To delete the Connection profile previously created for Tom Lynch:

```
admin> delete conn tlynch
Delete profile CONNECTION /tlynch? [y/n] y
CONNECTION /tlynch deleted
```

See Also: Get, New, Read

Device

Description: Initiates a state change in a specified device. The device is specified by its interface address. This command is typically used to administratively turn a device on or off. For a list of devices supported by the Stinger unit, see the description of Device-Address.

Permission level: Diagnostic

Usage: `device -d`|`-t`|`-u`|`-?` *interface_address*

Option	Description
-d	Bring the specified device down.
-t	Toggle debug output level.
-u	Bring the specified device up.
-?	Display a usage summary.
interface_address	The interface address of the device, specified as shelf, slot, item number, and logical item number.

Example: To administratively disconnect device #24 in slot #3 on shelf #1:

```
admin> device -d {{1 3 24} 0}
```

See Also: Show, Slot

Dir

Description: Lists profiles. With no options, the Dir command lists all profile types supported by the Stinger unit. It can also be used to list all profiles of a certain type, or to list file-system information about a specific profile.

Permission level: System

Usage: dir [*profile-type* [*profile-index*]]

Variable	Description
profile-type	List all the profiles of the specified type.
profile-index	Display information about the specified profile.

Example: To list all profile types, enter the Dir command with no options:

```
admin> dir
ADMIN-STATE-PERM-IF    SNMP Permanent Interface Admin State
ADMIN-STATE-PHYS-IF    SNMP Physical Interface Admin State
AL-DMT-STAT            Dmt Alcatel adsl line status
AL-DMT                 Alcatel cell dmt adsl line parameters
ANSWER-DEFAULTS        Answer profile
ATMPVC-STAT            ATM PVC State
ATMVCC-STAT            ATM VCC State
BANDWIDTH-ALLOC        Bandwidth allocation for slots for ATM
BANDWIDTH-STATS        Bandwidth statistics for slots for ATM
BASE                   System version and enabled features
CALL-INFO              Active call information
CALL-LOGGING           Call logging
CONNECTION             Connection (WAN) profiles
DEVICE-STATE           Device Operational State
DEVICE-SUMMARY         Device availability summary information
ERROR                  Fatal Error log
ETHER-INFO             Ethernet Interfaces Information
ETHERNET               Ethernet Interfaces Configuration
EXT-TSRV               Remote Terminal Server Config Information
EXTERNAL-AUTH          External authentication info
IP-GLOBAL              Global TCP/IP parameters
IP-INTERFACE           IP interfaces
IP-ROUTE               Static IP routes
LOAD-SELECT            Code images to load
LOG                    System event logging configuration
SDSL                   Sdsl line parameters
SDSL-STAT              Sdsl line status
SERIAL                 Serial interfaces
SLOT-INFO              Slot Info profile
```

```
SLOT-STATE              Slot Operational State
SLOT-TYPE               Slot Type profile
SNMP                    SNMP configuration
SYSTEM                  System-wide basic parameters
TERMINAL-SERVER         Terminal server parameters
TIMEDATE                Current system date and time
TRAP                    SNMP trap destinations
USER             Administrative user accounts
```

To list all Connection profiles, as well as all RADIUS profiles for dedicated (nailed-up) connections, specify conn as the profile type. For example:

```
admin> dir conn
169  08/31/1998 22:21:07  dallas
195  09/12/1998 10:14:08  chicago
189  11/14/1998 09:34:44  nyc1
177  11/14/1998 11:38:09  nyc2
187  10/22/1998 15:34:53  la
201  10/14/1998 14:29:32  sacto
```

This form of the command is useful for displaying valid profile indexes. The index is in the rightmost field. The listing includes the following information:

- The first field shows the number of bytes the profile uses.
- The second field shows the date that the profile was last modified.
- The third field shows the time that the profile was last modified.
- The fourth field shows the profile index. If the profile does not have an index, the fourth field contains a period. If only one profile exists, the field displays that profile's name.

To list information about a specific profile, include its index on the command line:

```
admin> dir conn dallas
169  08/31/1998 22:21:07  dallas
```

See Also: List, Get

Dircode

Description: Displays the contents of the PCMCIA flash-card code directory. The flash cards contain code for the modules, run-time shelf controller, and profiles. The system configuration is stored in the onboard NVRAM.

Permission level: System

Usage: dircode

The following error messages can appear when you use the Dircode command:

Message	Description
`Card N is not formatted for use with this system`	The flash card is blank, corrupted, or formatted for another environment, such as DOS. To use this card, you must issue a Format command first.
`Card N is temporarily unavailable`	The flash card is currently coming up or is being formatted.
`Card N is unavailable`	The flash card experienced an error and is inaccessible. Check that the card is inserted properly.

Example:

```
admin> dircode
Flash card code directory:
Card 1, format FTL/FAT, capacity 8MB
/current:
  shelf-controller  1229934 Wed Jun  9 11:22:16 1999 Version 8.0a0e0
  sdsl-atm-card      525661 Wed Jun  9 11:22:46 1999 Version 8.0a0e0
 al-dmtadsl-atm-card  620347 Wed Jun  9 11:23:20 1999 Version 8.0a0e0
```

The information displayed by this command includes the card number (1 or 2) and the size of the code directory. For each expansion module installed in the system, it also shows the following information:

- The type of card the load is for.
- The size of the code related to the card.
- The date the load was copied to the flash card.
- The code version.

See Also: Format, Fsck, Load

DMTAL

Description: Displays the dedicated (nailed-group) numbers for ADSL-DMT lines.

Permission level: System

Usage: DMTAL

Example: The following command output shows the nailed-group numbers for an ADSL-DMT module in slot 4:

```
admin> dmtal -a

All ADSL lines:

                (dvOp dvUpSt dvRq sAdm nailg)
Line  { 1 4 1 } (Up     Idle UP   UP   00151)
Line  { 1 4 2 } (Up     Idle UP   UP   00152)
```

```
Line  { 1 4 3  }  (Up      Idle UP    UP    00153)
Line  { 1 4 4  }  (Up      Idle UP    UP    00154)
Line  { 1 4 5  }  (Up      Idle UP    UP    00155)
Line  { 1 4 6  }  (Up      Idle UP    UP    00156)
Line  { 1 4 7  }  (Up      Idle UP    UP    00157)
Line  { 1 4 8  }  (Up      Idle UP    UP    00158)
Line  { 1 4 9  }  (Up      Idle UP    UP    00159)
Line  { 1 4 10 }  (Up      Idle UP    UP    00160)
Line  { 1 4 11 }  (Up      Idle UP    UP    00161)
::
```

Column	Description
dvOp	The current operational state of the line:
	• Down indicates that the line is in a nonoperational state.
	• Up indicates that the line is in normal operation mode.
dvUpSt	The status of the line in normal operation mode:
	• Idle indicates that no call is on the line.
	• Active indicates that the line is handling a call.
dvRq	The required state of the line:
	• Down indicates that the line is required to be nonoperational.
	• Up indicates that the line is required to be in normal operation mode.
sAdm	The desired administrative state of the line:
	• Down specifies that the line should terminate all operations and enter the deactivated state.
	• Up specifies that the line should be activated in normal operation mode.
	The actual state of the line can differ from the desired state, as when a device is powering up, or you change the desired state on a running slot. Changing the desired state does not automatically change a line to the desired state. It indicates that an operation has been initiated (for example, someone has dialed in) that should change the Stinger unit to the desired state.
nailg	The dedicated (nailed) group to which the line is assigned.

DMTALDSLlines

Description: Displays discrete multitone (DMT) Alcatel ADSL line use.

Permission level: System

Usage: `dmtaldsllines [-a|-d|-f|-u]`

Option	Description
null	Display options.
-a	Display all DMT Alcatel ADSL lines.
-d	Display all disabled DMT Alcatel ADSL lines.
-f	Display all free DMT Alcatel ADSL lines.
-u	Display all ATM DMT Alcatel ADSL lines in use.

Example: To display all DMT Alcatel ADSL lines:

```
All DMT Alcatel ADSL lines:
                           (dvOp   dvUpSt  dvRq    sAdm    nailg)
  Line    {    1  4  1 }   (Down   Idle    UP      UP      00151)
  Line    {    1  4  2 }   (Down   Idle    UP      UP      00152)
  Line    {    1  4  3 }   (Down   Idle    UP      UP      00153)
  Line    {    1  4  4 }   (Up     Idle    UP      UP      00154)
  Line    {    1  4  5 }   (Down   Idle    UP      UP      00155)
  Line    {    1  4  6 }   (Down   Idle    UP      UP      00156)
  Line    {    1  4  7 }   (Down   Idle    UP      UP      00157)
  Line    {    1  4  8 }   (Down   Idle    UP      UP      00158)
  Line    {    1  4  9 }   (Down   Idle    UP      UP      00159)
  Line    {    1  4 10 }   (Down   Idle    UP      UP      00160)
  Line    {    1  4 11 }   (Down   Idle    UP      UP      00161)
  Line    {    1  4 12 }   (Down   Idle    UP      UP      00162)
```

The data displayed includes the physical address of each line and the following status information::

Column	Description
dvOp	The current operational state of the line: • Down indicates that the line is in a nonoperational state. • Up indicates that the line is in normal operation mode.
dvUpSt	The status of the line in normal operation mode: • Idle indicates that no call is on the line. • Active indicates that the line is handling a call.
dvRq	The required state of the line: • Down indicates that the line is required to be nonoperational. • Up indicates that the line is required to be in normal operation mode.

Column	Description
sAdm	The desired administrative state of the line:

- Down specifies that the line should terminate all operations and enter the deactivated state.

- Up specifies that the line should be activated in normal operation mode.

The actual state of the line can differ from the desired state, as when a device is powering up, or you change the desired state on a running slot. Changing the desired state does not automatically change a line to the desired state. It indicates that an operation has been initiated (for example, someone has dialed in) that should change the Stinger unit to the desired state .

Column	Description
nailg	The (dedicated) nailed group to which the line is assigned.

See Also: SDSLlines

Dnstab

Description: Displays the Fallback domain name server (DNS) table, a local DNS host table used only when the regular name lookup fails. This table contains eight entries with each entry containing a host name and a list of the host IP addresses.

Permission level: System

Usage: dnstab -s [*entry number* **]**

Example:

admin> dnstab -s

Local DNS Table: enabled, AutoUpdate: enabled.

Local DNS Table

```
      Name          IP Address    # Reads  Time of last read

   _____  _____  _____  _____
1: "wheelers"    206.65.212.9     *       1 ---
2: "foxhound"    1.0.0.1                  - ---
3: ""            -------                  - ---
5: ""            -------                  - ---
6: ""            -------                  - ---
7: ""            -------                  - ---
8: ""            -------                  - ---
```

Dependencies: For the fallback table to be available, parameters must be configured in the Table-Config subprofile of the Dns-Local-Table subprofile of the Ip-Global profile. See the Table-Config parameter and see the *Stinger Administration Guide* for details about setting up this table.

See Also: DNS-Local-Table, DNS-Secondary-Server

Dumpcachestat

Description: Displays statistics about cache usage.

Permission level: System

Usage: `dumpcachestat`

Example:

```
imago> dumpcachestat
Cache Updates  0     total 22
Cache Attempts 0     total 44
Cache Hits     0     total 22
Add count 321 Del count 216
Array Add count 0 Del count 0
Number of flash devices created 1 deleted 0
```

Ether-Display

Description: Displays the contents of Ethernet packets.

Permission level: Diagnostic

Usage: `ether-display port# n`

Variable	Description
port#	The Ethernet port on which the packets are received or transmitted. If you specify 0 (zero) for the port number, the Stinger unit displays all ports on the shelf.
n	The number of octets to display in each Ethernet packet.

Example: To display Ethernet packet contents for port 0 in 12-octet sizes:

```
admin> ether-display 0 12
ETHER XMIT: 12 of 60 octets
10799E40: 08 00 20 75 80 6b 00 c0  7b 5e ad 3c          .. u.k.. {^.<
ETHER RECV: 12 of 60 octets
1077D980: 00 c0 7b 5e ad 3c 00 80  c7 2f 27 ca          ..{^.<.. ./'.
ETHER XMIT: 12 of 509 octets
1079A480: 00 80 c7 2f 27 ca 00 c0  7b 5e ad 3c          .../'... {^.<
ETHER XMIT: 12 of 330 octets
1079AAC0: 08 00 20 75 80 6b 00 c0  7b 5e ad 3c          .. u.k.. {^.<
ETHER RECV: 12 of 60 octets
1077DFD0: 00 c0 7b 5e ad 3c 08 00  20 75 80 6b          ..{^.<..  u.k
ETHER XMIT: 12 of 451 octets
1079B100: 08 00 20 75 80 6b 00 c0  7b 5e ad 3c          .. u.k.. {^.<
ETHER XMIT: 12 of 723 octets
1079B740: 00 20 af f8 0f 1d 00 c0  7b 5e ad 3c          . ...... {^.<
ETHER XMIT: 12 of 84 octets
1078F580: 08 00 20 75 80 6b 00 c0  7b 5e ad 3c          .. u.k.. {^.<
ETHER RECV: 12 of 60 octets
```

```
1077E620: 00 c0 7b 5e ad 3c 00 20  af f8 0f 1d           ..{^.<.  ....
ETHER XMIT: 12 of 238 octets
1078FBC0: 00 20 af f8 0f 1d 00 c0  7b 5e ad 3c           . ...... {^.<
ETHER XMIT: 12 of 373 octets
10790200: 00 20 af f8 0f 1d 00 c0  7b 5e ad 3c           . ...... {^.<
ETHER RECV: 12 of 60 octets
1077EC70: 00 c0 7b 5e ad 3c 00 20  af f8 0f 1d           ..{^.<.  ....
ETHER XMIT: 12 of 267 octets
10790840: 00 20 af f8 0f 1d 00 c0  7b 5e ad 3c           . ...... {^.<
```

To stop displaying the Ethernet statistics, enter:

```
admin> ether-display 0 0
```

Note: You must set Debug On for Ether-Display to have any effect.

Fatal-History

Description: Displays the Stinger unit fatal-error log. Every time a fatal error occurs on the Stinger unit, it is logged to the fatal-error history log. Available flash space limits the number of entries in the log. You can clear the log with the Clr-History command.

Permission level: System

Usage: `fatal-history`

Example: To display the fatal-history log:

```
admin> fatal-history
OPERATOR RESET:  Index:  99  Revision: 1.3Ap6 Shelf 1
        Date: 09/20/1998.       Time: 16:56:01
        Reset from unknown, user profile super.
OPERATOR RESET:  Index:  99  Revision: 1.3Ap6  Shelf 9
        Date: 09/24/1998.       Time: 11:56:10
        Reset from unknown, user profile super.
```

See Also: Clr-History

Format

Description: Formats a PCMCIA flash card, preparing it for use in the Stinger unit. You must format the card before you can use the Load command to load code.

Permission level: Code

Usage: format [-f] *device*

Argument	Description
-f	Force format without asking for verification.
device	The name of the flash card to be formatted. The following are valid names: • [flash-card-]1 • [flash-card-]2 Note that device names may be abbreviated as 1 and 2.

The following error messages can appear when you use the Format command.

Message	Description
error: flash card N is not present	No flash card is detected in the specified slot (1 or 2).
error: flash card N is unavailable	The flash card in the specified slot is already being formatted, is just coming up, or is in an error condition.
error: flash card N is write-protected	The write-protect switch is set on the card in the specified slot (1 or 2).
error: flash card N is currently in use	One or more images on the flash card are currently in use (being read by a line interface or trunk module in LOAD state or being written as part of a code download).

Example: After inserting a PCMCIA flash card in the second (rightmost) slot on the shelf controller, you would format it as follows:

```
admin> format flash-card-2
format will erase existing card 2 data; confirm: [y/n] y
```

See Also: Dircode, Fsck, Load

Fsck

Description: Audits inconsistent file conditions (which can include file contents) on a PCMCIA flash card. For each file found, the command displays the type-name, type-number, decimal and hex byte counts, date written to flash, and whether blocks that were in use were allocated to a file. Any detected errors are reported. No errors are fixed.

Permission level: Code

Usage: fsck [-b -c -v] *device*

Argument	Significance
-b	Try to ignore bad identifiers. Each flash card file system contains two directory blocks: an in-use block and an empty block used when deleting information. Both directory blocks contain an identifier that indicates that they are indeed directory blocks. A candidate directory block is one that is missing the magic identifier but contains information that can be interpreted as directory-block information. If the Fsck command finds no valid directory block but does find a candidate directory block, this option causes the system to ignore the missing identifier and use the candidate directory block anyway. The file system is to be used normally until the next reboot, assuming that the Fsck command finds no other errors.
-c	Do not check file contents. By default, Fsck checks the file contents for validity, which involves opening and reading every file, checking the file header, verifying the data length and CRC value, and performing other functions. This option causes Fsck to check only the file-system format.
-v	Display verbose messages, including the number of blocks used, a block list, and (unless the −c option is specified) information about the files found.
device	The name of the flash card to be checked. The following are valid names: • [flash-card-]1 • [flash-card-]2 Note that device names may be abbreviated as 1 and 2.

Example: To run a file-system check of the card named flash-card-1:

```
admin> fsck 1
Volume Stats:
  Block Size: 512 (typical: 512)
  Blocks Per Cluster: 4 (typical: 1, may be powers of 2 up to 16)
  Reserved Blocks: 1 (typical: 1, but may be 0 - hundreds)
  Number of FATs: 2 (must be 2)
  Number of Root Directory Entries: 128 (typically between 32 and 224)
  Total Blocks: 13824
  Media Descriptor: f0 (ignored)

Volume Info calculated from values above:
  Blocks Per Fat: 11
  Fat Start Block: 1
  Root Dir Start Block: 23
  Data Start Block: 31
  Number of Root Dir Blocks: 8
  Number of Clusters: 3448
  FAT Type: Fat12

Cluster Usage
  Usable Clusters: 3446
  Free Clusters: 2284
```

```
    Clusters lost during interrupted writes: 0
    Other reserved clusters: 1158
```

See Also: Dircode, Format, Load

Get

Description: Displays the contents of a profile or subprofile, but does not make it writable. Only the working profile can be modified. For information about reading a profile into the edit buffer to make it the working profile, see "Read" on page 1-87.

The Get command recognizes the period character (.) as a shorthand for the working profile (the profile in the edit buffer).

Permission level: System

Usage: `get profile-type [`*`profile-index`*`][[`*`sub-profile`*`]` `[`*`param-name`* `[`*`param-index`*`]]`

Syntax element	Description
profile-type	The type of profile to be displayed, which might require an index as well. A period represents the working profile (the profile in the edit buffer).
profile-index	The profile index (the name or address that distinguishes a profile from others of the same type). To see profile indexes, use the Dir command.
sub-profile	A subprofile within the specified profile.
param-name	A parameter within the specified profile. If the parameter is in a subprofile, you must specify the subprofile name first.
param-index	Complex parameters have an index. For example, the Interface-Address parameter contains both the physical-address and logical-item indexes.

Example: To display the contents of a Connection profile called Dallas:

```
admin> get connection dallas
[in CONNECTION/dallas]
station*=dallas
active=yes
encapsulation-protocol=atm
called-number-type=national
dial-number=85283
clid=""
ip-options={ yes yes 1.1.1.1/8 0.0.0.0/0 7 100 255 no no 0 +
session-options={ "" "" no 120 no-idle 120 "" }
telco-options={ ans-and-orig no off 1 no no 64k-clear 0 "" "" +
answer-options={ }
usrRad-options={ global 0.0.0.0 1646 "" 1 acct-base-10 }
calledNumber=""
```

To display the IP-Options subprofile:

```
admin> get connection dallas ip-options
[in CONNECTION/dallas:ip-options]
ip-routing-enabled=yes
vj-header-prediction=yes
remote-address=0.0.0.0/0
local-address=0.0.0.0/0
routing-metric=7
preference=100
down-preference=255
private-route=no
temporary-route=no
ip-direct=0.0.0.0
rip=routing-off
client-default-gateway=0.0.0.0
if-remote-address=0.0.0.0
tos-options={ no 00 normal input }
source-ip-check=no
```

Several additional examples follow. The first shows how to use the *param-name* argument for the IP address of an Ethernet interface:

```
admin> get ip-int {{1 c 1}0} ip-address
[in IP-INTERFACE/{ { shelf-1 controller 1 } 0 }:ip-address]
ip-address=10.65.12.224/24
```

The next example shows how to use a parameter index on the Get command line:

```
admin> get ip-int {{1 c 1}0} interface-address physical-address
[in IP-INTERFACE/{{shelf-1 controller 1} 0}:interface-address:
physical-address]
shelf=shelf-1
slot=controller
item-number=1
```

The Get command, followed by a period, displays the contents of the current location in the working profile:

```
admin> get .
[in CONNECTION/dallas:ip-options]
ip-routing-enabled=yes
vj-header-prediction=yes
remote-address=0.0.0.0/0
local-address=0.0.0.0/0
routing-metric=7
preference=100
down-preference=255
private-route=no
temporary-route=no
ip-direct=0.0.0.0
rip=routing-off
client-default-gateway=0.0.0.0
if-remote-address=0.0.0.0
```

```
tos-options={ no 00 normal input }
source-ip-check=no
```

As when you use the List command, you can modify "Get ." with ".." to display a higher context than the current location in the working profile:

```
admin> get . ..
[in CONNECTION/dallas]
station*=dallas
active=yes
encapsulation-protocol=atm
called-number-type=national
dial-number=""
clid=""
ip-options={ yes yes 10.122.99.1/24 0.0.0.0/0 7 100 255 no no +
session-options={ "" "" no 120 no-idle 120 "" 0}
telco-options={ ans-and-orig no off 1 no no 56k-restricted 0 +
usrRad-options={ global 0.0.0.0 1646 "" 1 acct-base-10 }
calledNumber=""
framed-only=no
atm-options={ aal5-llc 0 32 }
atm-connect-options={ aal5-llc 0 32 }
```

To display a deeper context than the current location in the working profile, specify one or more subprofiles after the period:

```
admin> get . ip
[in CONNECTION/dallas:ip-options]
ip-routing-enabled=yes
vj-header-prediction=yes
remote-address=0.0.0.0/0
local-address=0.0.0.0/0
routing-metric=7
preference=100
down-preference=255
private-route=no
temporary-route=no
ip-direct=0.0.0.0
rip=routing-off
client-default-gateway=0.0.0.0
if-remote-address=0.0.0.0
tos-options={ no 00 normal input }
source-ip-check=no
```

See Also: Read, Write, List

Grep

Description: Filters the output of certain TAOS commands to make a a specified pattern. The command is modeled on the the Grep command from the UNIX environment and has numerous applications in the TAOS operating system. The number of commands that support the Grep capability changes as the functionality is integrated into the system. Following is a representative list of commands that currently support the Grep feature:

```
arptable
briChannels
cadslLines
callroute
dadslLines
dir
ds3AtmLines
filterdisp
help
if-admin
ifmgr
ipcache
list
modem
oc3AtmLines
ospf
swanLines
t1channels
uds3Lines
userstat
vdslchannels
```

Usage: To search for a particular pattern in command output, use the following syntax:

command | grep [-c *expression*|-i *expression*]| -v *expression*]

Argument	Description
`| grep`	Displays only information that matches the expression pattern.
`-c expression`	Counts occurrences of the expression only. Does not display information.
`-i expression`	Uses pattern matching against the expression that is not case sensitive.
`-v expression`	Displays only information that does not match the expression pattern.

For the expression argument, the grep feature supports the following regular expressions, wildcard characters, and patterns:

Regular expression	Description
`\` (backslash)	Turns off any special meaning of the following character.
`.` (period)	Matches any single character in the input string.
`*` (asterisk)	Matches zero or more occurrences of the previous character.
`''`	(single quotation marks) Encloses an expression to be matched.
`""`	(double quotation marks) Enclose a pattern that contains spaces or other quotation marks.
`^` (circumflex)	Specifies the beginning of a line.
`$` (dollar sign)	Specifies the end of line.

| (vertical bar) | Specifies a logical OR relationship. |

`[]` (square brackets) Specifies any one of the characters in a range.

`()` (parentheses) Identifies group expressions

To search for a character that is a wildcard, you must precede it with the backslash character, even if the wildcard character is within the boundaries of quotation marks.

The output data from the command is scanned line by line. If the pattern you specify is encountered in the line, that line is displayed. If you use the `-c` argument, the number of lines found matching the pattern are counted and displayed at the end of the command. Note that the column headers and footers might be omitted from the display if they do not match the pattern. However, error messages are exempt from pattern matching.

Note: If you use the Grep feature with a command that does not support filtering, the system does not display an error. Instead, the command output is simply not filtered.

Example: Following are two uses of the Grep command related to virtual links and soft PVCs:

```
admin> ? | grep atmv
atmvccstat ( system )
atmvcl ( system )
atmvcx ( system )
atmvpl ( system )
atmvpx ( system )
admin> ? | grep spv
spvcc ( system )
spvcstat ( system )
spvpc ( system )
```

HDSL2Lines

Description: Displays the port status and dedicated (nailed group) for each HDSL2 port

Usage: The command is used as follows:

```
Syntax: Hdsl2Lines [ -a | -d | -f | -u | -t ]
```

Option	Description
-a	Show (a)ll HDSL2 lines
-d	Show (d)isabled lines
-f	Show all (f)ree lines
-u	Show in-(u)se lines
-t	Toggle debug flag

For example here is the display for the first 16 ports on and HDSL2 card in slot 4

```
.Stinger> hdsl2 -a
All HDSL2 lines:
                (dvOp dvUpSt dvRq sAdm nailg)
Line { 1 4 1 }   (Down Idle DOWN DOWN 00151)
Line { 1 4 2 }   (Down Idle DOWN DOWN 00152)
Line { 1 4 3 }   (Up   Idle UP   UP   00153)
Line { 1 4 4 }   (Down Idle DOWN DOWN 00154)
Line { 1 4 5 }   (Down Idle DOWN DOWN 00155)
Line { 1 4 6 }   (Down Idle DOWN DOWN 00156)
Line { 1 4 7 }   (Up   Idle UP   UP   00157)
Line { 1 4 8 }   (Down Idle DOWN DOWN 00158)
Line { 1 4 9 }   (Up   Idle UP   UP   00159)
Line { 1 4 10 }  (Up   Idle UP   UP   00160)
Line { 1 4 11 }  (Down Idle DOWN DOWN 00161)
Line { 1 4 12 }  (Down Idle DOWN DOWN 00162)
Line { 1 4 13 }  (Up   Idle UP   UP   00163)
Line { 1 4 14 }  (Down Idle DOWN DOWN 00164)
Line { 1 4 16 }  (Down Idle  DOWN  DOWN 00166)
```

Column	Description
dvOp	The current operational state of the line: • Down indicates that the line is in a nonoperational state. • Up indicates that the line is in normal operation mode.
dvUpSt	The status of the line in normal operation mode: • Idle indicates that no call is on the line. • Active indicates that the line is handling a call.
dvRq	The required state of the line: • Down indicates that the line is required to be nonoperational. • Up indicates that the line is required to be in normal operation mode.
sAdm	The desired administrative state of the line: • Down specifies that the line should terminate all operations and enter the down state. • Up specifies that the line should come up in normal operations mode. The actual state of the line can differ from the desired state, as when a device is starting up, or you change the desired state on a running slot. Changing the desired state does not automatically change a line to the desired state. It indicates that an operation has been initiated that should change the Stinger unit to the desired state desired.
nailg	The dedicated (nailed) group to which the line is assigned.

Help

Description: Displays a list of all available commands or help text about a specific command. The question-mark (?) is a shortcut version of this command.

Permission level: User

Usage: `help [-a]|[`*command-name*`]`

Option	Description
`-a`	List all commands. (Without this option, the list includes only commands authorized by the current User profile.)
`command-name`	Display information about the specified command.

Example: To display a list of commands authorized for your current login:

```
admin> help
?                                ( user )
arp                              ( system )
auth                             ( user )
clear                            ( user )
clock-source                     ( diagnostic )
clr-history                      ( system )
connection                       ( system )
date                             ( update )
delete                           ( update )
device                           ( diagnostic )
dir                              ( system )
dircode                          ( system )
ether-display                    ( diagnostic )
fatal-history                    ( system )
format                           ( code )
get                              ( system )
help                             ( user )
if-admin                         ( diagnostic )
line                             ( system )
[More? <ret>=next entry, <sp>=next page, <^C>=abort]
```

To display help text about the Dir command, for example:

```
admin> help dir
dir                    list all profile types
dir profile-type        list all profiles of the specified type
dir profile-type profile-index list the specified profile
instance
```

Dependencies: The current security level is set by the current User profile and determines which commands are displayed in response to this command. If the current User profile does not have sufficient privileges to execute a command, the command is not displayed unless you specify the `-a` option. By default, commands that go with the current User security level are always displayed.

See Also: Auth

If-Admin

Description: Displays information about or specifies the state of an SNMP interface. Each device in the system has a unique SNMP interface number assigned to the device when a module is installed. Interface numbers are stored in NVRAM, which is not affected by system resets. A physical device keeps the same interface number across system resets or power failures.

Permission level: Diagnostic

Usage: if-admin -a|-d *interface*|-l|-u *interface*|-r *interface*|-?

Option	Description
-a	List available SNMP interface numbers.
-d *interface*	Administratively disconnect a specified SNMP interface
-l	List SNMP interface and device address mappings.
-u *interface*	Administratively turn on a specified SNMP interface.
-r *interface*	Reset an SNMP interface.
-?	Display a usage summary.

Example: To display a list of all SNMP interface numbers assigned by the system, specify the -l option:

```
admin> if-admin -l
SNMP-IF   DEVICE ADDRESS
  101   -   { 1 11 32 }
    1   -   { 1 17 1 }
  102   -   { 1 11 33 }
    2   -   { 1 3 1 }
  103   -   { 1 11 34 }
    3   -   { 1 3 2 }
  104   -   { 1 11 35 }
    4   -   { 1 3 3 }
  105   -   { 1 11 36 }
    5   -   { 1 3 4 }
  106   -   { 1 11 37 }
    6   -   { 1 3 5 }
  107   -   { 1 11 38 }
    7   -   { 1 3 6 }
  108   -   { 1 11 39 }
    8   -   { 1 3 7 }
[More <ret>=next entry, <sp>=next page, <^C>=abort]
```

To turn on SNMP interface number 111:

```
admin> if-admin -u 111
interface 111 state change forced
```

Imagroups

Description: Displays the status of any groups (groups of E1 or T1 interfaces configured in IMA mode)that have been created , or those that are in use, free, or disabled, on any LIMs in a Stinger unit.

Permission level: System

Usage: `imagroups -[ a | d | f | u ]`

Syntax element	Description
Null	Displays the options for this command.
-a	Shows all IMA groups.
-d	Shows disabled groups.
-f	Shows all free groups.
-u	Shows groups that are in use.

Example:

```
admin> imagroups -a
All IMA groups:
                 (dvOp  dvUpSt dvRq   sAdm     nailg)
ima-co { 1 2 25 }  (Down  Idle   UP     UP        100)
```

Column	Description
dvOp	The current operational state of the line:
	• Down indicates that the line is in a nonoperational state.
	• Up indicates that the line is in normal operation mode.
dvUpSt	The status of the line in normal operation mode:
	• Idle indicates that no call is on the line.
	• Active indicates that the line is handling a call.
dvRq	The required state of the line:
	• Down indicates that the line is required to be nonoperational.
	• Up indicates that the line is required to be in normal operation mode.

Column	Description
sAdm	The desired administrative state of the line:

- Down specifies that the line should terminate all operations and enter the deactivated state.
- Up specifies that the line should be activated in normal operations mode.

The actual state of the line can differ from the desired state, as when a device is powering up, or you change the desired state on a running slot. Changing the desired state does not automatically change a line to the desired state. It indicates that an operation has been initiated that should change the Stinger unit to the desired state desired.

nailg	The dedicated (nailed) group to which the line is assigned.

Imalines

Description: Displays the status of all T1 or E1 lines, or those that are in use, free, or disabled, on any T1 or E1 line interface modules (LIMs) in a Stinger unit.

Permission level: System

Usage: Usage: imalines -[a | d | f | u]

Syntax element	Description
Null	Displays the options for this command.
-a	Shows all IMA lines.
-d	Shows disabled lines.
-f	Shows all free lines.
-u	Shows lines that are in use.

Example:

```
admin> imalines -a
(dvOp dvUpSt dvRq sAdm lMode Nailg)
Line { 1 2 1 } (Down Idle DOWN DOWN UNI 00051)
Line { 1 2 2 } (Up Idle UP UP IMA 00100)
Line { 1 2 3 } (Down Idle DOWN DOWN IMA 00100)
Line { 1 2 4 } (Down Idle DOWN DOWN UNI 00054)
....
Line { 1 2 24 } (Down Idle DOWN DOWN UNI 00074)
```

Column	Description
dvOp	The current operational state of the line:
	• Down indicates that the line is in a nonoperational state.
	• Up indicates that the line is in normal operation mode.
dvUpSt	The status of the line in normal operation mode:
	• Idle indicates that no call is on the line.
	• Active indicates that the line is handling a call.
dvRq	The required state of the line:
	• Down indicates that the line is required to be nonoperational.
	• Up indicates that the line is required to be in normal operation mode.
sAdm	The desired administrative state of the line:
	• Down specifies that the line should terminate all operations and enter the deactivated state.
	• Up specifies that the line should come be activated in normal operations mode.
	The actual state of the line can differ from the desired state, as when a device is powering up, or you change the desired state on a running slot. Changing the desired state does not automatically change a line to the desired state. It indicates that an operation has been initiated that should change the Stinger unit to the desired state desired.
nailg	The dedicated (nailed) group to which the line is assigned.

See Also: Imagroups, Imagroup (profile), IMA-Link-Status

IMA-TPP

Description: Initiates a test to detect misconfigured inverse multiplexing ATM (IMA) connections. Supports the implementation of the IMA test pattern procedure (TPP) for testing connectivity according to ATM Forum IMA specifications af-phy-0086.000, af-phy-0086.001, and optional specification O-31.

Permission level: Debug

Usage: `ima-tpp` *group-name test-link test-pattern* [*enable yes | no>*] [*reply yes | no>*]

Syntax element	Description
Null	Displays the options for this command.
group-name	Name of the IMA group profile.
test-link	Identify the test link to be used to perform the in-band test pattern procedure. The range of this parameter is 1 through 24 on a 24-port T1 or E1 LIM, and 1 through 8 on an 8-port T1 or E1 LIM. This value should correspond to one of the links within an IMA group.
test-pattern	Specify the test pattern you want to use. Specify a value in the range 0 through 255 to manually select a pattern. The default is 255.
enable	Enables or disables the test pattern procedure. Specify `yes` to enable the procedure, or `no` to disable it.
reply	Enables or disables a report of test pattern procedure status. Specify `yes` to receive a report, or `no` to disable it.

Example:

```
admin> ima-tpp ima3_4 7 200 yes yes

IMA TPP request sent, please wait for response ...


admin> TPP test result:
ImaGroupName=ima3_4, ImaTppTestResult=TPP_PASSED

2 links configured in IMA group ima3_4, all passed TPP test !
```

See Also: IMA-Link-Status, IMA-Link-Statistic

IPcache

Description: A utility that displays, debugs, enables, and disables the IP Route Cache.

Permission level: System

Usage: `ipcache [ cache | debug | disable | enable]`

Option	Description
cache	Displays the cache.
debug	Enables or disables debugging
disable	Disables IP Route Cache Routing on module. Enabled by default. Available only on modules.
enable	Enables IP Route Cache Routing on module. Available only on modules.

Example: The following displays sample command output.

Shelf example:

```
admin> ipcache cache


Hsh       Address          Gateway          Ifname    Sh/Sl/T   MTU
20        50.0.0.20        192.168.26.74    wan392    1/14/D    1524
40        20.0.0.40        20.0.0.40        ie1-3-1   1/3 /S    1500


Cache Limit 0 Cache Count 2 Cache over limit 0 No.packets 9
Mem Usage: Allocated 1k bytes
Free block count 22
```

The column in the command output can display the following information:

Column	Description
Hsh	Hash code
Address	Destination IP address
Gateway	IP address of the gateway
Ifname	Interface name
Sh/Sl/T	• Sh is an abbreviation for shelf • Sl is an abbreviation for slot • Type (T) is either D (dynamic cache entry) or S (static cache entry).
MTU	Maximum transmission unit
MPath	The MPath column displays cache entries that are derived from multipath routes. If Y is displayed, the route is listed.

The following displays sample command output from a slot:

```
ether2-1/3> ipcache cache
```

Hsh	Address	Gateway	Sh/Sl/T	Switched	MTU	MPath
0	99.1.1.1	192.168.21.30	1/14/D	0	1524	Y/0.0.0.0/0
20	50.0.0.20	192.168.28.170	1/15/D	85068	1524	Y/0.0.0.0/0
40	20.0.0.40	20.0.0.40	1/3/S	0	1500	N

See Also: IProute

IProute

Description: Enables you to manually add or delete IP routes. Changes to the routing table do not persist across system resets.

Permission level: System

Usage:
```
iproute [add dest_IPaddr[/subnet_mask] gateway_IPaddr[
/subnet_mask] [pref] [metric]
        |delete dest_IPaddr/subnet_mask [gateway_IPaddr
[/subnet_mask]]]
```

Syntax element	Description
add	Add an IP route to the routing table.
delete	Delete an IP route from the routing table.
dest_IPaddr/su bnet_mask	Destination network address and subnet mask (in bits). The default is 0.0.0.0/0.
gateway_IPaddr /subnet_mask	IP address of the router that can forward packets to the destination network, and subnet mask (in bits). The default is 0.0.0.0.
pref	Route preference. The default is 100.
metric	Virtual hop count of the route. You can enter a value between 1 and 15. The default is 1.

To add a static IP route to the unit's routing table, use the IProute Add option.

```
iproute [add dest_IPaddr[/subnet_mask] gateway_IPaddr
[/subnet_mask] [pref] [metric]
```

For example, the following command adds a route to the 10.1.2.0 network, through the IP router located at 10.0.0.3/24. The metric to the route is 1 (one hop away).

```
admin> iproute add 10.1.2.0/24 10.0.0.3/24 1
```

If you try to add a route to a destination that is already in the routing table, the Stinger unit replaces the existing route only if it has a higher metric than the route you are attempting to add. If you get the message Warning: a better route appears to exist, the Stinger unit has rejected your attempt to add a route. Note that RIP updates can change the metric for the route.

Note: Any routes you add with the add option are lost when you reset the Stinger unit.

To remove a static IP route from the unit's routing table, enter the IProute delete option.

iproute delete *dest_IPaddr/subnet_mask*
[***gateway_IPaddr***[***/subnet_mask***]]

For example, the following command removes the route to the 10.1.2.0 network:

```
admin> iproute delete 10.1.2.0/24 10.0.0.3/24
```

Note: RIP updates can add back any route you remove with delete option. Also, the Stinger unit restores all routes listed in the IP-Route profile after a system reset.

See Also: IPcache

Line

Description: Specifies that the upper-right or lower-right portion of the status window (or both) should display line and channel status information. If the status window is not already displayed, this command opens it with the connection status information displayed.

Permission level: System

Usage: `line all|enabled top|bottom`

Option	Description
`all`	Display status information about all lines.
`enabled`	Display status information only about enabled lines.
`top`	Display line status in the upper portion of the status window.
`bottom`	Display line status in the lower portion of the status window (the default).

Example: To display line status information in the upper part of the status window use the command as follows:

```
admin> line top
```

```
 2 Connections
001 tomw TCP 1/7/14 19200
002 timl TCP 1/7/3  56000
```

```
SanFran+ 1/13/8   RA I........ ........ ......
 Berkeley 1/01/04 RA N........ ........ ......
         1/01/05 RA T........ ........ ......
 Clevela+ 1/01/01 RA T........ ........ ......
 Oakland  1/01/02 RA S........ ........ ......


M: 48 L: info Src: shelf-1/controller



              Issued: 16:48:02, 09/27/1998
```

`[Next/Last Conn  <dn/up arw>, Next?Last Page: <pg dn/up>, Exit: <esc>]`

Line status information includes the following identifiers and codes:

- A line identifier in shelf/slot/line format.
- A two-character code indicating the line's link status.
- A single-character code indicating channel status. For an SS7 data trunk, this character code is always 7.

Following are the link-status codes:

Code	Description
`LS` (UDS3 lines)	Loss of signal. No signal has been detected.
`LF` (UDS3 lines)	Loss of frame. A signal is present but is not valid for framing.

Code	Description
RA	Red alarm. The line is not connected, or it is improperly configured, experiencing a very high error rate, or supplying inadequate synchronization.
YA	Yellow alarm. The Stinger unit is receiving a yellow alarm pattern, which indicates that the other end of the line cannot recognize the signals the Stinger unit is transmitting.
DF	D-channel fail. The D channel for a PRI line is not currently communicating.
1S	All ones. The network is sending a keepalive signal to the Stinger unit to indicate that the line is currently inoperative.
DS	Disabled. The line might be physically connected, but the profile specifies that it is inactive.

Following are the channel-status codes:

Code	Description
.	The channel is not available for one of the following reasons: • The line is disabled. • The channel has no physical link or does not exist. • The channel configuration specifies that the channel is unused. • The channel is reserved for framing.
*	The channel is connected in a current call.
–	The channel is currently idle (but in service).
c	The channel is currently not available because it is in the process of clearing the most recent call, or because it is in the process of sending echo cancellation tones to receive a call.
d	The Stinger unit is dialing from this channel for an outgoing call.
r	The channel is ringing for an incoming call.
m	The channel is in maintenance/backup mode (ISDN and SS7 only).
n	The channel is dedicated (nailed).
o	The channel is out of service (ISDN and SS7 only).
s	The channel is an active D channel (ISDN only).

To display a prompt below the status window, press the Escape key. To scroll through the list of lines, press the Up-Arrow or Down-Arrow key, or to page up or down through the lines, press the Page Up or Page Dn key. To close the status window:

```
admin> status
```

See Also: Connection, Log, View

List

Description: Lists the contents of the current or specified context in the working profile. Listing a subprofile changes the current context to that subprofile. Specifying two periods (..) as the command argument changes the current context back to one level higher in the working profile ("closing" the subprofile). The List command works only on the working profile.

Permission level: System

Usage: list [..] [*param-name* [*param-index*] [*sub-profile*]]

Option	Description
.. (two periods)	Close the current subprofile and return to the previous higher context.
param-name	A parameter in the current context. If the parameter is in a subprofile, you must specify the subprofile name first.
param-index	Complex parameters have an index. For example, the Interface-Address parameter contains both the physical-address and logical-item indexes.
sub-profile	List the contents of a subprofile that is visible in the current context, and make that subprofile the current context.

Example: To make a Connection profile named Dallas the working profile:

```
admin> read connection dallas
```

To list its contents:

```
admin> list
[in CONNECTION/dallas]
station*=dallas
active=yes
encapsulation-protocol=atm
called-number-type=national
dial-number=85283
clid=""
ip-options={ yes yes 1.1.1.1/8 0.0.0.0/0 7 100 255 no no 0 +
session-options={ "" "" no 120 no-idle 120 "" }
telco-options={ ans-and-orig no off 1 no no 64k-clear 0 "" "" +
usrRad-options={ global 0.0.0.0 1646 "" 1 acct-base-10 }
calledNumber=""
```

To list the IP-Options subprofile:

```
admin> list ip-options
[in CONNECTION/dallas:ip-options]
ip-routing-enabled=yes
vj-header-prediction=yes
remote-address=0.0.0.0/0
local-address=0.0.0.0/0
routing-metric=7
preference=100
down-preference=255
```

```
private-route=no
temporary-route=no
ip-direct=0.0.0.0
rip=routing-off
client-default-gateway=0.0.0.0
if-remote-address=0.0.0.0
tos-options={ no 00 normal input }
source-ip-check=no
```

To return to the top-level context of the profile:

admin> **list ..**

To use the List command to display the Telco-Options subprofile:

```
admin> list .. telco
[in CONNECTION/dallas:telco-options]
answer-originate=ans-and-orig
nailed-groups=1
force-56kbps=no
data-service=56k-restricted
call-by-call=0
billing-number=""
transit-number=""
```

The List command works only on the working profile. To make an existing profile the working profile, use the Read command. When you create a new profile, it becomes the working profile automatically.

See Also: Dir, Get, Read, New, Set, Write

Load

Description: Uploads a code image to flash or runs a remote configuration script. The code image or script can be located on the disk of the PC you are using for the terminal session with the Stinger, on a network host that supports TFTP, or on the flash card file system of the control module.

Permission level: Update

Usage: load [-v][t] *load-type* [*subtype*] *source* [*target-device*]

Syntax element	Description
`-v`	Displays verbose output for configuration loads.
`-t`	Loads the peer control module as well as the current control module.
`load-type`	Type of the image to upload. If no load type is specified, the all load types that reside on the source device are loaded. Following are valid values: • `file`—Generic file. • `boot-cm`—Control module boot image. • `tar`—Software binaries. • `cm`—Control module image. • `sdsl-atm`—Code for an SDSL line interface module (LIM). • `al-dmtadsl-atm`—Code for a 12-port ADSL LIM. • `sdsl-atm-v2`—Not supported. • `dadsl-atm-24`—Code for a 24-port ADSL LIM. • `glite-atm-48`—Not supported. • `annexb`—Not supported. • `hdsl2`—Not supported. • `t1000`—Not supported. • `ima`—Not supported.
`subtype`	Subtype of the image. Following are valid values: • `normal`—Regular image. The default. • `debug`—Debugging image. • `diagnostic`—Diagnostic image.
`source`	Location from which the file is loaded. Following are valid values: • `network` *host filename*—After typing the word network, you can specify a hostname or IP address and path to the file on a TFTP host. • `console`—The PC connected to the Stinger via the serial port. • *flash device filename*—The flash card number and file-name of the configuration file.
`target-device`	Name of the PCMCIA flash card to load. Following are valid device names: • `[flash-card-]1` (default) • [flash-card-]2 The device names may be abbreviated as `1` and `2`. You need not specify a target device if the load type is `config`.

Example: To load a configuration file named unit.cfg from network host 10.8.7.2 to flash card 1:

```
admin> load config network 10.8.7.2 /unit.cfg
```

To load Stinger control module image stngrtcm.ffs from a TFTP server pclab-20 and copy the image to the peer control module:

```
admin> load -t cm network pclab-20 stngrtcm.ffs
loading code from 207.137.197.90
file stngrtcm.ffs...
done.
Attempting to write image(s) to other controller
Trying device 1 of remote controller first
Transferring 1/current/stngrtcm.ffs ...
done.
1 image successfully transferred
```

To load Stinger tar image stngrrel.tar from TFTP server pclab-20 and copy all images to the peer control module:

```
admin> load -t tar network pclab-20 stngrrel.tar
loading code from 207.137.197.90
file stngrrel.tar...
untaring and loading image for...
cm (stngrcm/stngrcm.ffs)...
sdsl-atm-card (stngrcsdsl/stngrcsdsl.ffs)...
al-dmtadsl-atm-card (stngrcaldsl/stngrcaldsl.ffs)...
done.
Attempting to write image(s) to other controller
Trying device 1 of remote controller first
Attempting to transfer all loads
Transferring 1/current/stngrcm.ffs ...
done.
Transferring 1/current/stngrcsdsl.ffs ...
done.
Transferring 1/current/stngrcaldsl.ffs ...
done.
3 images successfully transferred
```

To load the unitrel.tar file from a network host named host1:

```
admin> load tar network host1 unitrel.tar
```

Dependencies: You can set parameters in the Load-Select profile to specify which control module images to load to flash when you use a Load Tar command. An explicit Load command for a particular module type overrides the settings in the Load-Select profile. The Load command supports type checking to verify that the load type specified on the command line matches the image header.

See Also: Dircode, Format, Fsck, Load, Save

Loadmate

Description: Loads code images from one control module to the other. The command can be invoked from either the primary control module or the secondary control module

Permission level: Update

Usage: loadmate [*load-type*] [*sub-type*] *source-device* [*target-device*] [*filename*]

Syntax element	Description
load-type	Type of image to transfer. If no load type is specified, then all load types that reside on the source device are transferred. Following are valid values: • file—Generic file. • boot-cm—Control module boot image. • cm—Control module image. • sdsl-atm—Code for an SDSL LIM. • al-dmtadsl-atm—Code for 12-port ADSL LIM. • sdsl-atm-v2—Not supported • dadsl-atm-24—Code for 24-port ADSL LIM. • glite-atm-48—Not supported. • annexb—Not supported. • hdsl2—Not supported. • t1000—Not supported. • ima—Not supported.
sub-type	Subtype of the image. Following are valid values: • normal—Regular image (default). • debug—Debugging image. • diagnostic—Diagnostic image.
source-device	Either of the following: • Boot image number (1 or 2) on the source control module for boot images. If no boot number is specified, then boot image 2 is used as the default. • PCMCIA flash card number of the source control module for nonboot images.
target-device	PCMCIA flash card number of the destination control module for nonboot images. This parameter must be specified for nonboot images, but is not used for boot images.
filename	Name of the file when the load type is file.

Example: To copy the control module's software image from flash card 1 of the control module in slot 8 to flash card 1 of the control module in slot 9, enter the following command on the control module in slot 8:

```
admin> loadmate cm 1 1
```

To copy boot image 2 on the control module in slot 8 to the onboard flash memory of the control module in slot 9, enter the following command on the control module in slot 8:

```
admin> loadmate boot
```

To transfer all images of any known load type on flash card 1 of the control module in slot 9 to flash card 2 of the control module in slot 8, enter the following command on the control module in slot 9:

```
admin> loadmate 1 2 (executed )
```

Dependencies: A `load` and `loadmate` operation or two `loadmate` operations cannot be run simultaneously. Both control modules must be running TAOS release 7.11.2 or later.

See Also: Dircode, Format, Fsck, Load, Save

Log

Description: Specifies that the upper-right or lower-right portion of the status window (or both) should display a message from the Stinger unit log buffer that contains the most recent system events. If the status window is not already displayed, this command opens it with the connection status information displayed.

The Log profile controls whether logs are sent to a Syslog host, as well as how many logs are stored in the Stinger unit buffer. The number of events stored in the log is set by the Save-Number parameter. For more information about the Log profile, see the description of the Log profile.

Permission level: System

Usage: `log top|bottom`

Option	Description
`top`	Display the log in the upper-right portion of the status window.
`bottom`	Display the log in the lower-right portion of the status window.

Example: To display the event log in the lower portion of the status window:

```
admin> log bottom
```

```
 2 Connections                          Status
001 tomw TCP 1/7/14 19200               Serial number: 6201732    Version: 1.0F
002 timl TCP  1/7/3  56000
                                         Rx Pkt:    11185897
                                         Tx Pkt:      42460
                                           Col:        129

                                        12/26/1998 12:20:15  Up:    3 days, 21:47:32

                                        M: 29 L: info Src: shelf-1/controller




                                                Issued: 16:48:02, 09/27/1998
```

[Next/Last Conn <dn/up arw>, Next?Last Page: <pg dn/up>, Exit: <esc>]

The first line of the event-log window shows the log entry number (M: 00 through M: *N*, where *N* is set in the Save-Number parameter of the Log profile), the level of message, and the device on which the event occurred. The last line shows the date and time when the event occurred.

The message levels are as follows:

Level	Description
emergency	A failure or major error has occurred, and normal operation is doubtful.
alert	A failure or major error has occurred, but normal operation can probably continue.
critical	An interface has gone down, or there has been a security error.
error	Something that should not occur has occurred.
warning	Something out of the ordinary, such as a login failure due to an invalid user name or password, has happened in otherwise normal operations.
notice	Something of interest, such as a link going up or down, has happened during normal operation.
info	A change in state or status was noticed. Such messages are not of general interest.
debug	The message is of interest only if you are debugging a configuration.

The text of the most recent message is displayed in the middle of the window. You can press the Up-Arrow key to see previous messages, and return to more recent messages by pressing the Down-Arrow key.

Following are some sample informational messages:

Informational message	Description
Incoming call	A call has been received but not yet routed.
Outgoing call	The Stinger unit has dialed a call.
Added Bandwidth	The Stinger unit has added bandwidth to an active call.

Informational message	Description
`Ethernet up`	The Ethernet interface has been initialized and is running.
`Call Terminated`	An active call was disconnected normally, although not necessarily by operator command.
`Removed Bandwidth`	The Stinger unit has removed bandwidth from an active call.
`RADIUS config error`	The Stinger unit has detected an error in the configuration of a RADIUS user profile.
`Requested Service Not Authorized`	This message appears in the terminal server interface if the user requests a service not authorized by the RADIUS server.

Following are some sample warning messages:

Warning message	Description
`Busy`	The phone number was busy when the call was dialed.
`No connection`	The remote end did not answer when the call was dialed.
`Network problem`	The call setup was faulty because of problems in the WAN or in the Line profile configuration. The D channel might be getting an error message from the switch, or the telco might be experiencing a problem.
`Call disconnected`	The call has ended unexpectedly.
`Far end hung up`	The remote end terminated the call normally.
`Incoming glare`	The Stinger unit could not place a call because it saw an incoming *glare* signal from the switch. If you receive this error message, you have probably selected incorrect Line profile parameters. Check the Robbed-Bit-Mode setting.
`Call Refused`	An incoming call could not be connected.

Press the Escape key to display a prompt below the status window. Then, to close the status window, enter the Status command:

```
admin> status
```

See Also: Connection, Log (profile), View

Ls

Description: Shows the contents of any PCMCIA flash card directory. Lists file name, subtype, status, size, and creation date.

Permission level: System

Usage: ls [*socket*[/*pathName*]]

Option	Description
socket	Specify the flash card number.
/*path*	Specify a subdirectory on the flash card.

Example:

```
esprit> ls
ls 1/current
ls Flash card 1:
current/                             0 Wed Nov 15 12:24:08 2000
/current:
stngrcm.ffs                    3154652 Wed Nov 15 12:25:14 2000
Version 9.0-126.0e0
stngrcsdsl.ffs                  738960 Wed Nov 15 12:25:30 2000
Version 9.0-126.0e0
stngrcaldsl.ffs                 958456 Wed Nov 15 12:25:50 2000
Version 9.0-126.0e0
stngrral24dsl.ffs               742266 Wed Nov 15 12:26:08 2000
Version 9.0-126.0e0
stngrgltdsl.ffs                 691168 Wed Nov 15 12:26:28 2000
Version 9.0-126.0e0
stngrrsdsl.ffs                  736002 Wed Nov 15 12:26:46 2000
Version 9.0-126.0e0
```

Netstat

Description: Displays the Stinger unit interface and routing tables, protocol statistics, and active sockets.

Permission level: System

Usage: netstat [-i] [-r[*host*]] [?] [-n | -d]
[-s *identifiers*][-z]

Option	Description
null	Display UDP and TCP statistics.
-i	Display the IP interface table.
-r *host*	Display the IP routing table. You can specify a hostname after the −r option to display the routing table entry for that host.
-?	Display a usage summary.
-n	Display numeric addresses rather than symbolic names (the default).
-d	Display symbolic names rather than numeric addresses.

Option	Description
`-s identifiers`	Display protocol statistics. If no identifiers follow the −s option, all protocol statistics are printed. If you specify one or more identifiers, they determine the type of protocol statistics to display. The valid protocol identifiers are: • `udp` • `tcp` • `icmp` • `ip` • `igmp` • `mcast`
`-z`	Display Zombie routes created for RIP. Zombie routes are those that have been deleted from the main routing table and are advertised with an infinite metric (16) for a period of 2 minutes to cause neighboring router to flush this route from their tables.

Example:

To display both UDP and TCP statistics, do not specify any options.

```
admin> netstat

udp:
-Socket-   Local Port   InQLen    InQMax     InQDrops     Total Rx
1/c    0         1023        0         1          0            0
1/c    1        route        0         0          0           25
1/c    2         echo        0        32          0            0
1/c    3          ntp        0        32          0            1
1/c    4         1022        0       128          0            0
1/c    5         snmp        0       128          0            0
1/1    0            1        0       256          0            0
1/1    1         1018        0       128          0            0
1/3    0            3        0       256          0            0
1/3    1         1021        0       128          0            0
1/5    0            5        0       256          0            0
1/5    1         1020        0       128          0            0
tcp:
Socket  Local                        Remote                         State
1/c 0   *.23                         *.*                            LISTEN
1/c 1   10.2.3.114.23                15.5.248.121.44581    ESTABLISHED
```

The display fields contain the following information:

Column	Description
`Socket`	The shelf, slot, and socket corresponding to a local UDP or TCP port.
`Local Port`	The port on which the Stinger unit is listening for UDP packets.
`InQLen`	The number of packets in the input queue for the socket. The packets are waiting to be processed.

Column	Description
InQMax	The maximum number of packets that can reside in the input queue for the socket. A value of 0 (zero) means no limit. The Stinger unit drops excess packets.
InQDrops	The number of packets dropped from the input queue because the value of InQMax was reached.
Total Rx	The total number of packets received on the socket, including dropped packets.
Local	The local IP address and port for a TCP session. For example, in the value 10.2.3.114.23, 10.2.3.114 specifies the IP address and 23 specifies the port for a TCP session. If the address portion contains only an asterisk (*), the Stinger unit is listening for the start of a TCP session.
Remote	The remote IP address and port for a TCP session. For example, in the value 15.5.248.121.44581, 15.5.248.121 specifies the IP address and 44581 specifies the port for a TCP session. If the specification contains only asterisks (*.*), the Stinger unit is listening for the start of a TCP session.
State	The state of the session. The possible state values are:

- CLOSED—The socket is not in use.
- LISTEN—The socket is listening for incoming connections. Note that no session is associated with the LISTEN state, because this state precedes the establishment of a TCP session.
- SYN_SENT—The socket is trying to establish a connection.
- SYN_RECEIVED—The connection is being synchronized.
- ESTABLISHED—The connection is established.
- CLOSE_WAIT—The remote side has shut down the connection, and the Stinger unit is waiting for the socket to close.
- FIN_WAIT_1—The socket is closed, and the Stinger unit is shutting down the connection.
- CLOSING—The socket is closed. The Stinger unit is waiting for acknowledgment that the remote end has shut down.
- LAST_ACK—The remote end has shut down and closed the socket, and it is waiting for an acknowledgment from the Stinger unit.
- FIN_WAIT_2—The socket is closed, and the Stinger unit is waiting for the remote end to shut down the connection.
- TIME_WAIT—The socket is closed, and the Stinger unit is waiting for a remote-shutdown retransmission.

For UDP, Netstat reports the following services:

Service	UDP port number
Route	520
Echo	7
NTP	123
SNMP	161

Service	UDP port number
SNMPTrap	162

For TCP, Netstat reports the following services:

Service	TCP port number
Telnet	23

The Stinger unit interface table shows the address of each interface. To display the Stinger unit interface table, specify the –i option:

```
admin> netstat -i
```

The entries in the interface table associated with the Stinger unit Ethernet interfaces use the following naming convention, where ie stands for interface ethernet:

```
ie[shelf]-[slot]-[item]
```

For example, the following output shows a four-port Ethernet card in slot 13:

```
Name      MTU  Net/Dest          Address       Ipkts   Ierr Opkts   Oerr
ie0       1500 12.65.212.0/24    12.65.212.227 107219     0 54351      0
lo0       1500 127.0.0.1/32      127.0.0.1       4867     0  4867      0
rj0       1500 127.0.0.2/32      127.0.0.2          0     0     0      0
bh0       1500 127.0.0.3/32      127.0.0.3          0     0     0      0
wan4      1500 10.122.99.1       -                  0     0     0      0
ie1-12-1 1500 11.168.6.0/24      11.168.6.227  430276   651     0      0
ie1-12-2 1500 10.122.72.0/24     10.122.72.1        0     0     0   3144
ie1-12-3 1500 10.122.73.0/24     10.122.73.1        0     0  3142      0
ie1-12-4  1500 10.122.74.0/24      10.122.74.1 0   0  3141      0
```

The columns in the interface table contain the following information:

Column	Description
Name	The name of the interface must be one of the following: • ie0 or ie[shelf]-[slot]-[item] — Indicates an Ethernet interface. • lo0—Indicates a loopback interface. • rj0—Indicates a reject interface, used in network summarization. • bh0—Indicates a blackhole interface, used in network summarization. (Blackhole routes are used to ensure that illegal internet traffic does not pass a firewall.) • wanN—Indicates a WAN connection, displayed in this report as it becomes active. • wanabe—Indicates an inactive RADIUS dialout profile.
MTU	(Maximum Transmission Unit) The maximum packet size allowed on the interface.

Column	Description
Net/Dest	The network or the target host this interface can reach.
Address	The address of this interface.
Ipkts	The number of packets received.
Ierr	The number of packets that contain errors.
Opkts	The number of packets transmitted.
Oerr	The number of transmitted packets that contain errors.

To display the routing table, specify the –r option:

```
admin> netstat -r
```

Destination Age	Gateway	IF	Flg	Pref	Metric	Use
0.0.0.0/0 48630	206.65.212.1	ie0	SG	100	1	4891
10.0.0.0/24 9236	11.168.6.249	ie1-12-1	RGT	100	3	0
10.0.100.0/24 48601	11.168.6.86	ie1-12-1	RGT	100	2	0
10.0.200.0/24 48601	11.168.6.86	ie1-12-1	RGT	100	2	0
10.122.72.0/24 48630	-	ie1-12-2	C	0	0	3141
10.122.72.1/32 48630	-	lo0	CP	0	0	0
10.122.73.0/24 48630	-	ie1-12-3	C	0	0	3140
10.122.73.1/32 48630	-	lo0	CP	0	0	0
10.122.74.1/32 48630	-	lo0	CP	0	0	0
10.122.99.0/24 48630	10.122.99.1	wan4	SG	100	7	0
10.122.99.1/32 48630	10.122.99.1	wan4	S	100	7	1
127.0.0.1/32 48672	-	local	CP	0	0	0
127.0.0.2/32 48672	-	rj0	CP	0	0	0
127.0.0.3/32 48672	-	bh0	CP	0	0	0
11.0.2.0/24 48626	11.168.6.249	ie1-12-1	RGT	100	2	0
11.168.6.0/24 48630	-	ie1-12-1	C	0	0	14589
11.168.6.0/24 48606	11.168.6.116	ie1-12-1	*RGTM	100	8	0
11.168.6.0/24	11.168.6.142	ie1-12-1	*RGTM	100	8	0

```
48610
11.168.6.0/24    11.168.6.96   ie1-12-1  *RGTM  100  8      0
48624
```

The columns in the routing table contain the following information:

Column	Description
Destination	The route's target address. To send a packet to this address, the Stinger unit uses this route. If the target address appears more than once in the routing table, the Stinger unit uses the most specific route (having the largest subnet mask) that matches that address.
Gateway	The next hop router that can forward packets to the given destination. Direct routes (without a gateway) show a hyphen in this column.
IF	The name of the interface through which to send packets over this route must be one of the following • ie0 or ie[shelf]-[slot]-[item]—Indicates an Ethernet interface. • lo0—Indicates a loopback interface. • rj0—Indicates a reject interface, used in network summarization. • bh0—Indicates a blackhole interface, used in network summarization. (Blackhole routes are used to ensure that illegal internet traffic does not pass a firewall). • wanN—Indicates a WAN connection, entered as it becomes active. • wanabe—Indicates an inactive RADIUS dialout profile. • local—Indicates a single route targeted at the local machine.
Flg	One or more of the following flags: • C—a directly connected route, such as Ethernet • I—an ICMP redirect dynamic route • N—placed in the table via SNMP MIB II • R—a route learned from RIP • r—a transient RADIUS-like route • S —a static route • ?—a route of unknown origin, which indicates an error • G—an indirect route via a gateway • P—a private route • T—a temporary route • M—a multipath route • *—a backup static route for a transient RADIUS-like route
Pref	The preference value. See the description of the Preference parameter for information about defaults for route preferences.
Metric	A RIP-style metric for the route, with a range of 0-16.

Column	Description
Use	A count of the number of times the route was referenced since it was created. (Many of these references are internal, so this is not a count of the number of packets sent over this route.)
Age	The age of the route in seconds. RIP and ICMP entries are aged once every 10 seconds.

You can include identifiers in the command line to display IP, UDP, TCP, ICMP, and IGMP protocol statistics. The system displays TCP statistics collected from line modules as well as the shelf controller. All other types of statistics are collected for the shelf controller only. The following example uses the tcp identifier:

```
admin> netstat -s tcp
tcp:
        17 active opens
        160 passive opens
        0 connect attempts failed
        9 connections were reset
        4294967215 connections currently established
        75620 segments received
        82645 segments transmitted
        313 segments retransmitted
        1 active closes
        1 passive closes
        0 disconnects while awaiting transmission
```

See Also: NSlookup, Ping, Traceroute

New

Description: Creates an instance of the specified profile type and makes the new profile the working profile. You can also use the command to assign the profile its index value. To write a new profile, you must uniquely identify it by setting its index field. In a profile listing, a parameter name followed by an asterisk identifies the index field. In most cases, the profile's parameters are assigned default values. However, depending on the profile type, the index chosen might affect the factory default values set in the profile. (For details, see page 1-61.)

Permission level: System

Usage: new *profile-type [profile-index]*[-f]

Syntax element	Description
profile-type	The type of profile you want to create.
profile-index	The index value of the profile.
-f	Do not prompt for confirmation when issuing a New command that would overwrite the unsaved contents of the edit buffer .

If you create a new indexed profile without using the *profile-index* argument, a default index (usually null or zero) is used. For example:

Profile type	Default index
User	""
Serial	{ any-shelf any-slot 0 }
Ethernet	{ any-shelf any-slot 0 }
IP-Interface	{ { any-shelf any-slot 0 } 0 }

If you specify the *profile-index* on the command line, it is validated before use. For example:

```
admin> new sdsl {12 2 3}
error: bad index: unknown value "12"

admin> new system foo
error: profile has no index
```

If you specify a valid index, it is applied to the new profile, which is read into the edit buffer. For example:

```
admin> new sdsl {1 2 3}
SDSL/{ shelf-1 slot-2 3 } read

admin> list
[in SDSL/{ shelf-1 slot-2 3 } (new)]
name=""
physical-address*={ shelf-1 slot-2 3 }
enabled=no
line-config={ 0 0 static { any-shelf any-slot 0 } }
```

Example: To create a new Connection profile called Tim:

```
admin> new conn tim
CONNECTION/tim read

admin> list
[in CONNECTION/tim (new)]
station*=tim
active=no
encapsulation-protocol=atm
called-number-type=national
dial-number=""
clid=""
ip-options={ yes yes 0.0.0.0/0 0.0.0.0/0 7 100 255 no no 0 +
session-options={ "" "" no 120 no-idle 120 "" }
telco-options={ ans-and-orig no off 1 no no 56k-restricted 0 +
usrRad-options={ global 0.0.0.0 1646 "" 1 acct-base-10 }
calledNumber=""

admin> write
CONNECTION/tim written
```

Dependencies: The index you choose might affect the factory default values set in the profile. For example, if you specify the profile-index default for a User profile, the factory default permission settings are as follows:

```
admin> new user default
USER/default read

admin> list
[in USER/default (new)]
name*=default
password=""
active-enabled=yes
allow-termserv=no
allow-system=no
allow-diagnostic=no
allow-update=no
allow-password=no
allow-code=no
allow-debug=no
idle-logout=0
prompt=*
default-status=no
top-status=general-info
bottom-status=log-window
left-status=connection-list
use-scroll-regions=no
log-display-level=none
```

If you specify admin instead, the factory-default permissions are set as follows:

```
admin> new user admin
USER/admin read

admin> list
[in USER/admin (new)]
name*=admin
password=MyPW
active-enabled=yes
allow-termserv=yes
allow-system=yes
allow-diagnostic=yes
allow-update=yes
allow-password=no
allow-code=yes
allow-debug=no
idle-logout=0
prompt=*
default-status=no
top-status=general-info
bottom-status=log-window
left-status=connection-list
use-scroll-regions=no
log-display-level=error
```

See Also: Delete, List, Read, Set, Write

NSlookup

Description: Resolves the IP address of a specified hostname by performing a DNS lookup. The IP-Global profile must be configured with the address of at least one DNS server. For information about configuring DNS, see the *Stinger Administration Guide*.

Permission level: Diagnostic

Usage: nslookup *hostname*

Syntax element	Description
hostname	The hostname for which you want to obtain an IP address.

Example: To look up a host's IP address in DNS:

```
admin> nslookup host-231
Resolving host host-231.
IP address for host host-231 is 10.65.12.231.
```

See Also: Aliastbl, Netstat

NVRAM

Description: Provides functions for managing or clearing onboard nonvolatile random access memory (NVRAM). The onboard NVRAM stores the system configuration. Clearing NVRAM initializes the system. It starts up unconfigured, just as it was when you first installed it. You can then restore the configuration from a recent backup. For details, see the *Stinger Administration Guide*.

Permission level: Update

Usage: nvram -f│-t│-u│-c│-?

Option	Description
-f	Clear NVRAM without prompting for confirmation.
-t	Toggle module debug level.
-u	Display NVRAM usage statistics.
-c	Compact the NVRAM storage.
-?	Display a usage summary.

Example: To display memory usage information, specify the −u option:

```
admin> nvram -u
NVRAM seg[0]:start 14000098 size 258040 avail 191680 cmpct 0
```

You can enter the command without any arguments to clear NVRAM and reset the unit:

```
admin> nvram
Clear configuration and reboot? [y/n]
```

Dependencies: You must reset the Stinger unit after clearing NVRAM and reloading a configuration.

See Also: Load, Save, Reset

OAM

Description: Enables you to send F4 and F5 operations, administration, and maintenance (OAM) connectivity and loopback testing cells from a port on a Stinger trunk module or LIM to a remote DSL port—for example, to a customer premises equipment (CPE) device.

Permission level: Diagnostic

Usage: Syntax 1 is used when running the command from a trunk module. Syntax 2 is used when running the command from a line interface module (LIM).

1) `oam -e|-c|-l|-p|-L|-C [slot] [port] [vpi] [vci]`

2) `oam [-L port vpi s n ]`

Option	Description
e	Displays the OAM entry list
c	Runs an OAM F5 connectivity test
l	Runs an OAM F5 loopback test
p	Turns on/off OAM internal debug
C	Runs an OAM F4 connectivity test
L	Runs an OAM F4 loopback test
slot	Slot number. Not used when running the command from the LIM.
port	Port number on a CPE device
vpi	Virtual path identifier (VPI) number. Not used when running the command from the LIM.
vci	Specifies the virtual channel identifier (VCI) number
s	Runs a segment test, and must be followed by a value for the *n* variable.
n	Number of consecutive segments in the segment test.

Example: To send 64 consecutive segment loopback cells to VPI 15 on DSL port 2, issue the OAM command using syntax 2:

`admin> `**`oam -L 2 15 s 64`**

The following command displays additional information about the outgoing and incoming segment test cells:

`admin> oam -p`

Dependencies: When you run the OAM command from the control module (CM) for the virtual channel on the trunk port, you need to use syntax 1 and specify slot and port number to identify the trunk, for example 17 1.

When you run OAM command from stinger line interface module (LIM) for the virtual channel on the LIM DSL port, you use syntax 2. You only need to specify the port number to identify the DSL port, e.g. 1 or 24. You can verify this with the help for the OAM command: run the OAM `help` command from LIM slot card, and you see that it does not display the word [slot] as a variable.

Note: F4 OAM segment and end-to-end loopback testing is supported on the following Stinger modules only:

- All Stinger trunk modules

- 12-port ADSL LIMs (STGR-LIM-AD-12 only)

- 12-port ADSL LIMs with Annex B support (STGR-LIM-AN-12 only)

- 48-port SDSL LIMs (STGR-LIM-SH-48 only)

See Also: OAMloop

OAMloop

Description: Sends ATM operation-and-maintenance (OAM) loopback cells on an Asynchronous Transfer Mode (ATM) interface:

Permission level: Diagnostic

Usage: `oamloop -e|-s [-c count][-i sec] shelf slot vpi vci`

Argument	Description
`-e`	(End-to-End). Transmit an end-to-end OAM loop cell, to be looped by the user connection point.
`-s`	(Segment). Transmit a segment OAM loop cell, to be looped by the first network connection point.
`-c count`	Transmit the specified number of cells. If this argument is not specified, the count defaults to 0 (zero), which means that the cells are transmitted continuously until the administrator sends an interrupt by pressing Ctrl-C.
`-i sec`	Transmit the cells at the specified interval in seconds. If this argument is not specified, the interval defaults to one second.
`shelf`	Specifies the shelf in which the OC3 ATM trunk module is located.
`slot`	Specifies the slot in which the OC3 ATM trunk module is located.
`vpi`	Specifies the virtual path identifier (VPI) on which to transmit the looped-back cells.
`vci`	Specifies the virtual channel identifier (VCI) on which to send the looped-back cells.

Example: Following is an example OAMloop command line and output:

```
admin> oamloop -c 10 -e 1 2 1 32
Received our End2End OAM loopback cell, Id=9
Received our End2End OAM loopback cell, Id=10
Received our End2End OAM loopback cell, Id=11
Received our End2End OAM loopback cell, Id=12
Received our End2End OAM loopback cell, Id=13
Received our End2End OAM loopback cell, Id=14
Received our End2End OAM loopback cell, Id=15
Received our End2End OAM loopback cell, Id=16
Received our End2End OAM loopback cell, Id=17
Received our End2End OAM loopback cell, Id=18
--- OAM loop statistics ---
10 cells transmitted, 10 cells received, 0% cell loss
```

See Also: OAM

Open

Description: Each trunk module and line interface module (LIM) has its own processor, memory, operating system, and set of debug commands. The Open command sets up a Telnet-like session across the control bus to one of the modules. Then you can execute commands on that module.

Permission level: Diagnostic

Usage: `open 1..9 [1..16]`

Syntax element	Description
`1..9`	The shelf number.
`1..16`	The number of the expansion slot you want to diagnose.

Example: To open a session with a DS3-ATM trunk module installed in shelf 1, slot 1:

```
admin> open 1 1
```

The prompt changes to show your location, and you can list the available commands:

```
ds3-1/2> ?
?                             ( user )
auth                          ( user )
cbcardif                      ( debug )
checkd                        ( debug )
clear                         ( user )
clock-source                  ( diagnostic )
debug                         ( diagnostic )
debugd                        ( debug )
display                       ( debug )
dp-ram-display                ( debug )
dpram-test                    ( debug )
dspBypassClients              ( debug )
dspDial                       ( debug )
dspSetDddTimeslot             ( debug )
```

```
fill                              ( debug )
frreset                           ( debug )
gdb                               ( debug )
help                              ( user )
lifDebug                          ( debug )
logdebug                          ( debug )
logtest                           ( debug )
mibcbagt                          ( debug )
mibcbreq                          ( debug )
mibmgr                            ( debug )
modify                            ( debug )
nailedState                       ( debug )
nlcb                              ( debug )
open                              ( diagnostic )
quit                              ( user )
revision                          ( debug )
slots                             ( debug )
stackLimit                        ( debug )
stackUsage                        ( debug )
tdm                               ( debug )
timedMsgTest                      ( debug )
tprofmgr                          ( debug )
tss                               ( debug )
update                            ( debug )
version                           ( system )
whoami                            ( user )
```

To return to the shelf controller:

```
ds3-1/2> quit
```

See Also: Show, Slot

Ping

Description: Sends ICMP echo_request packets to the specified host as a way to verify that the host is established and the transmission path to the host is open. The host returns ICMP echo_response packets, and the command generates statistics about the exchange.

Permission level: Diagnostic

Usage: ping [-q|-f *host*|-v][-c *count*][-i *delay*][-s *packetsize*] *hostname*

Syntax element	Description
`-q`	Quiet. Do not display informational messages. Just display the summary lines at the beginning and end of the command.
`-f` *host*	Set the Don't Fragment (DF) bit in the IP header of Ping packets. Setting the DF bit enables the Stinger unit to identify the permissible datagram size, also called the path maximum transmission unit (PMTU), of the path from the remote host. If any datagram is too large to be forwarded without fragmentation by some router along the path, the router discards it and returns an ICMP Destination Unreachable message with a code that indicates fragmentation is needed and that DF is set.
`-v`	Verbose. List every ICMP packet received, except echo_response packets.
`-c` *count*	Send only the specified number of packets.
`-i` *delay*	Wait the specified number of seconds before sending the next packet. The default delay period is one second.
`-s` *packetsize*	Send the specified number of data bytes. The default size is 64 bytes, not including the 8-byte ICMP header. The minimum is 16.
hostname	The station's IP address or DNS hostname.

Example: To ping a host named Host-231 on a local network, do the following:

```
admin> ping host-231
PING host-231 (10.65.12.231): 56 data bytes
64 bytes from 10.65.12.231: icmp_seq=0 ttl=255 time=0 ms
64 bytes from 10.65.12.231: icmp_seq=1 ttl=255 time=0 ms
64 bytes from 10.65.12.231: icmp_seq=2 ttl=255 time=0 ms
64 bytes from 10.65.12.231: icmp_seq=3 ttl=255 time=0 ms
64 bytes from 10.65.12.231: icmp_seq=4 ttl=255 time=0 ms
^C
--- host-231 ping statistics ---
5 packets transmitted, 5 packets received, 0% packet loss
round-trip min/avg/max=0/0/0 ms
```

Press Ctrl-C to stop. To exchange only three packets, each of which contains only 16 bytes, use the Ping command as follows:

```
admin> ping -c 3 -s 16 host-231
PING host-231 (10.65.12.231): 8 data bytes
16 bytes from 10.65.12.231: icmp_seq=0 ttl=255 time=0 ms
16 bytes from 10.65.12.231: icmp_seq=1 ttl=255 time=0 ms
16 bytes from 10.65.12.231: icmp_seq=2 ttl=255 time=0 ms
--- host-231 ping statistics ---
3 packets transmitted, 3 packets received, 0% packet loss
round-trip min/avg/max=0/0/0 ms
```

To exchange three packets and suppress the output for each exchange, use the Ping command as follows:

```
admin> ping -c3 -q host-231
PING host-231 (10.65.12.231): 56 data bytes
```

```
--- host-231 ping statistics ---
3 packets transmitted, 3 packets received, 0% packet loss
round-trip min/avg/max=0/0/0 ms
```

See Also: Netstat, Telnet, Terminal-Server, Traceroute

PNNIdisplay

Description: The pnniDisplay command displays general information about the Private
Network-to-Network Interface (PNNI) implementation, including internal counters.

Permission level: System

Usage: pnnidisplay

Example: Following is sample output that shows that PNNI 1.0 is supported and that the
system failed to compute routes 148 times because the destination was unreachable.

```
admin> pnnidisplay
HighestVersion        = Version1point0
LowestVersion         = Version1point0
DtlCountOriginator     = 0
DtlCountBorder        = 0
CrankbackCountOriginator = 0
CrankbackCountBorder    = 0
AltRteCountOriginator   = 0
AltRteCountBorder      = 0
RteFailCountOriginator   = 148
RteFailCountBorder      = 0
RteFailUnreachOrg      = 148
RteFailUnreachBrdr      = 0
```

Field	Indicates
HighestVersion	Highest version of the PNNI protocols supported in the unit.
LowestVersion	Lowest version of the PNNI protocols supported in the unit.
DtlCountOriginator	Number of destination transit list (DTL) stacks the unit has originated and placed in PNNI signaling messages.
DtlCountBorder	Number of partial DTL stacks the unit has added into signaling messages in an entry border node.
CrankbackCount Originator	Number of connection setup messages, including DTL stacks the unit has originated, that have reversed back to this node.
CrankbackCountBorder	Number of connection setup messages, including DTL stacks the unit has added in an entry border node, that have reversed back to this node.
AltRteCountOriginator	Number of alternate DTL stacks the unit has computed and placed into signaling messages it originated.

Field	Indicates
AltRteCountBorder	Number of alternate partial DTL stacks the unit has computed and placed into signaling messages in an entry border node.
RteFailCountOriginator	Number of times the unit failed to compute a viable DTL stack as originator for a call. This value indicates the number of times a call was cleared due to originator routing failure.
RteFailCountBorder	Number of times the unit failed to compute a viable partial DTL stack in an entry border node for a call. This value indicates the number of times a call was either cleared or cranked back from this node due to border routing failure.
RteFailUnreachOrg	Number of times the unit failed to compute a viable DTL stack as originator because the destination was unreachable. This value indicates those calls that were cleared because the specified transit network was unreachable) or the destination was unreachable.
RteFailUnreachBrdr	Number of times the unit failed to compute a viable partial DTL stack in an entry border node because the target of the path calculation was unreachable. This value indicates those calls that were cleared or cranked back because the specified transit network was unreachable) or the destination was unreachable.

See Also: PNNIinterfacedisplay, PNNIlinkdisplay, PNNImapdisplay, PNNINbrdisplay, PNNInodedisplay, PNNInodetopology, PNNIPTSEStatus, PNNIreachableaddr, PNNIroutebase.

PNNIinterfacedisplay

Description: Displays specific interface details for Private Network-to-Network Interface (PNNI) . For details about Private Network-to-Network Interface (PNNI) interface configuration, see *Stinger Private Network-to-Network Interface (PNNI) Supplement.*

Permission level: System

Usage: pnniinterfacedisplay

Example: Following is sample command output that shows that both ports in trunk module 1 (slot 17) are configured for PNNI:

```
admin> pnniinterfacedisplay
Port  PhyAddr       IntIndex     Node        AggrToken     VpCap
801   {1 17 1}      11           1           0             Y

      Cbr Wt        RtVbr Wt     NrtVbr Wt   Abr Wt        Ubr Wt
      5040          5040         5040        5040          5040

Port  PhyAddr       IntIndex     Node        AggrToken     VpCap
802   {1 17 2}      12           1           0             Y
```

Cbr Wt	RtVbr Wt	NrtVbr Wt	Abr Wt	Ubr Wt
5040	5040	5040	5040	5040

Field	Indicates
Port	Dedicated (nailed group) number associated with the physical port.
PhyAddr	Physical address of the trunk port in the following format: { *shelf-n slot-n item-n* }
IntIndex	Entry number in the interface table.
Node	PNNI node index. Only node index 1 is currently supported.
AggrToken	Configured aggregation token for this interface.
VpCap	Y if the interface is capable of having virtual private channels (VPC) established within it, or N if it is not.
Cbr Wt	Configured administrative weight of this interface for the constant bit rate (CBR) service category.
RtVbr Wt	Configured administrative weight of this interface for the real-time variable bit rate (RT-VBR) service category.
NrtVbr Wt	Configured administrative weight of this interface for the non-real-time variable bit rate (NRT-VBR) service category.
Abr Wt	Configured administrative weight of this interface for the available bit rate (ABR) service category.
Ubr Wt	Configured administrative weight of this interface for the unspecified bit rate (UBR) service category.

See Also: PNNIlinkdisplay, PNNIlinkdisplay, PNNImapdisplay, PNNINbrdisplay, PNNInodedisplay, PNNInodetopology, PNNIPTSEStatus, PNNIreachableaddr, PNNIroutebase.

PNNIlinkdisplay

Description: Displays information about the operation of logical links attached to the local PNNI node and the relationship to nodes on the other end of the links. A Private Network-to-Network Interface (PNNI) *logical link* is a logical representation of the connectivity between two logical nodes, including the physical link and virtual path connection.

Permission level: System

Usage: pnniLinkDisplay [-d [*local node index* [*port Id*]]]

]

Option	Description
null	Show summary of all entries
-d	Show details of all entries
-d *local node index*	Show details for specified local node
-d *local node index port Id*	Show details for specified local node and port

With no options on the command line, the command prints a summary of all PNNI logical links.

Example: The following output shows two logical links, one on each of the configured trunk ports in slot 17. The first link is attempting Hello protocol exchanges with its neighbors and the second is established as a lowest-level horizontal link.

```
admin> pnnilinkdisplay
Node PortId      PhysicalAddr  IntfIndex   LinkType      HelloState
1    801         {1 17 1}      11          Unknown       Attempt

     RemoteNodeId
     00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00

Node PortId     PhysicalAddr   IntfIndex   LinkType      HelloState
1    802        {1 17 2}       12          Lowest horiz  Twoway inside

     RemoteNodeId
     60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:38:ff:b6:ca:99:00:00:00
```

Field	Indicates
Node	PNNI node index. Only node index 1 is currently supported.
PortId	Dedicated (nailed group) number associated with the physical port. The node index (1) and port ID identify the interface to which the link is attached.
PhysicalAddr	Physical address of the trunk port in the following format: { *shelf-n slot-n item-n* }
IntIndex	Entry number in the interface table for the interface to which the logical link corresponds. The value is valid only for LinkType values of Unknown, Lowest Level Horizontal Link, and Lowest Level Outside Link. All other link types display a zero value.
LinkType	Type of logical link. Possible types are Unknown, Lowest Level Horizontal Link, Horizontal link to/from LGN, Lowest Level Outside Link, Uplink, and Outside link and Uplink.

Field	Indicates
HelloState	State of the Hello protocol exchange across the link or the state of the corresponding LGN Horizontal Link Hello State Machine. For uplinks, the field displays NA. Other states have the following valid values: NA, Down, Attempt, Oneway Inside, Twoway Inside, Oneway Outside, Twoway Outside, Common Outside.
RemoteNodeId	Node ID of the neighboring node on the other end of the link. The value is valid only for LinkType values of Lowest Level Outside Link or Uplink. If the upnode has not yet been identified, or if the LinkType is Lowest Level Horizontal Link, the field displays zero.
RemotePortId	Port ID of the port at the other end of the link. If the LinkType field value is Outside link and Uplink, the field shows the port ID assigned by the lowest-level neighbor node to identify the outside link. If the remote port ID is unknown or if the LinkType value is Uplink, the field displays zero.
DerAggrToken	Derived aggregation token value on the link. For horizontal links between lowest-level nodes the value is always zero.
SvccRccIndex	The switched virtual channel connection (SVCC)-based routing control channel (RCC) used to exchange information with the neighboring peer logical group node. (*Not currently supported.*)
RcvHellos	Number of Hello packets received over this link. The value is valid for horizontal and outside links between lowest-level nodes and for links of unknown type. Other link types display zero.
XmtHellos	Number of Hello packets transmitted over this link. The value is valid for horizontal and outside links between lowest-level nodes and for links of unknown type. Other link types display zero.
UpnodeId	Node ID of the neighbor node. For horizontal links, or when the link type or the neighbor's node ID is not yet known, the field displays zero.
UpnodeAtmAddress	ATM end system address used to establish connections to the upstream neighbor node. For horizontal links, or when the link type or upstream neighbors node ID is not yet known, the field displays zero.
CommonPeerGroupId	Peer group ID of the lowest-level common peer group in the hierarchy of the neighboring node and the local node. For horizontal links, or when the link type or common peer group is not yet known, the field displays zero.
LinkVersion	Version of PNNI routing protocol used to exchange information over this link. If communication with the neighbor node has not yet been established, or if the link type is Uplink or Link to/from LGN, the field displays Unknown.

With the -d option, the command displays additional details. For example, the following output shows that the link on the first port in slot 17 (port ID 801) has transmitted 121 Hello packets but has received no information from the remote node.

```
admin> pnnilinkdisplay -d 1 801
Node PortId      PhysicalAddr    IntIndex      LinkType        HelloState
1    801         {1 17 1}        11            Unknown         Attempt

   RemoteNodeId
   00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00

   RemotePortId   DerAggrToken    SvccRccIndex   RcvHellos      XmtHellos
   0              0               0              0              121

   UpnodeId
   00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00

   UpnodeAtmAddress
   00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00

   CommonPeerGroupId                            LinkVersion
   00:00:00:00:00:00:00:00:00:00:00:00:00:00       1
```

See Also: PNNIlinkdisplay, PNNIinterfacedisplay, PNNImapdisplay, PNNINbrdisplay, PNNInodedisplay, PNNInodetopology, PNNIPTSEStatus, PNNIreachableaddr, PNNIroutebase.

PNNImapdisplay

Description: Displays information about the Private Network-to-Network Interface (PNNI) hierarchy.

Permission level: System

Usage: You can use this information to find and analyze the operation of all links and nodes within the PNNI hierarchy from the perspective of a local node. The command uses the following syntax:

Usage:
```
pnniMapDisplay[-d[local node index[originating node Id
         [originating port Id ]]]]
```

Syntax Element	Description
null	Display summary of all Map entries.
-d local *node index*	Display details of all Map and Metric entries for specified local node.
-d local node index *originating node Id*	Display details of all Map and Metric entries for specified local node and originating node.
-d local node index *originating node Id originating port Id*	Display details of all Map and Metric entries for specified local node, originating node and originating port.

With no options on the command line, the command displays information about links between local and remote nodes.

Example: In the following sample output, the system reports a link on each of its active PNNI ports with details about the originating and remote port IDs.

admin> **pnnimapdisplay**
Nd Index
1 1

OriginatingNodeId   OrigPortId
60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:30:ff:18:dd:98:00:00:00 802

RemoteNodeId   RmtPortId
60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:38:ff:b6:ca:99:00:00:00 801

Nd Index
1 1

OriginatingNodeId   OrigPortId
60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:38:ff:b6:ca:99:00:00:00 801

RemoteNodeId   RmtPortId
60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:30:ff:18:dd:98:00:00:00   802

Field	Indicates
Nd	PNNI node index. Only node index 1 is currently supported.
Index	Map indexSpecifies which of the many possible maps is referred to. There can be multiple entries for nodal connectivity from a specific node and port pair, in addition to any entry for a horizontal link or uplink (link moving upward in the hierarchy).
OriginatingNodeId	PNNI node ID of the originating node represented in this entry in the display.
OriginatingPortId	Port ID as assigned by the originating node.
RemoteNodeId	PNNI node ID of the remote node at the other end of the link from the originating node. If unknown, the field displays zero.
RemotePortId	Port ID as assigned by the remote node at the other end of the link from the originating node. If unknown, the field displays zero.
MapType	Type of PNNI entity being described by this entry in the map table. Valid values are HorizontalLink, Uplink, and Node.
PeerGroupId	Peer group ID of the originating node.
AggrToken	Derived aggregation token value for this link. For nodes and for horizontal links between lowest-level nodes, the field displays zero.
VPCap	A value of 1 indicates that virtual path connections (VPCs) can be established across the PNNI entity. A value of zero indicates that VPCs cannot be established.

Field	Indicates
PtseId	PNNI topology state element (PTSE) ID for the PTSE that contains the information group(s) describing the PNNI entity. The PTSE is originated by the originating node.
MetricsTag	Integer that represents a set of traffic parameters. The zero value indicates that no metrics are associated with the link or nodal connectivity.
Qos	Service categories to which this set of metrics applies.
Dir	Direction in which metrics apply (In for the in direction or Out for the out direction).
AdmWt	Administrative weight of the service category.
MCR	Maximum cell rate in cells per second for the service category.
ACR	Available cell rate in cells per second for the service category.
CTD	Maximum cell transfer delay in microseconds for the service category.
CDV	Cumulative cell delay variation in microseconds for the service category.
CLR0	Cell loss ratio for CLP=0 traffic for the service category.
CLR0+1	Cumulative cell loss ratio for CLP=0+1 traffic for the service category.

With the -d option, the command displays additional details about each link. In the following example, the command displays information about the link originating on port 802, including the type of link, the routing metrics, and attributes from this node to the specified remote node.

admin> **pnnimapdisplay -d 1**
Nd Index
1 1

OriginatingNodeId   OrigPortId
60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:30:ff:18:dd:98:00:00:00 802

RemoteNodeId   RmtPortId
60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:38:ff:b6:ca:99:00:00:00   801

MapType   PeerGroupId
HorizontalLink 60:39:84:0f:80:01:bc:72:00:01:31:a3:99:00

AggrToken   VpCap   PtseId   MTag
0   1   4   1118482

Qos	Dir	AdmWt	MCR	ACR	CTD	CDV	CLR0	CLR0+1
Cbr	Out	5040	366792	366792	6890	Unused	8	8
Rtvbr	Out	5040	366792	366792	6890	Unused	8	8
NrtVbr	Out	5040	366792	366792	6890	Unused	8	8
Abr	Out	5040	366792	366792	6890	Unused	8	8
Ubr	Out	5040	366792	366792	6890	Unused	8	8
Cbr	Out	5040	366792	366792	1574	1554	8	8

```
Rtvbr  Out   5040  366792  366792   1574   1554    8    8
NrtVbr Out   5040  366792  366792   1574   1554    8    8
Abr   Out   5040  366792  366792   1574   1554    8    8
Ubr   Out   5040  366792  366792   1574   1554    8    8
Cbr   Out   5040  366792  366792   674    654    8    8
Rtvbr  Out   5040  366792  366792   674    654    8    8
NrtVbr Out   5040  366792  366792   674    654    8    8
Abr   Out   5040  366792  366792   674    654    8    8
Ubr   Out   5040  366792  366792   674    654    8    8
```

See Also: PNNIlinkdisplay, PNNIinterfacedisplay, PNNIlinkdisplay, PNNINbrdisplay, PNNInodedisplay, PNNInodetopology, PNNIPTSEStatus, PNNIreachableaddr, PNNIroutebase.

PNNINbrdisplay

Description: The `pnniNbrDisplay` command displays information about the relationship between the local node and a neighboring node within the same peer group. A *neighbor node* is a node that is directly connected to a particular node via a logical link.

Permission level: System The command uses the following syntax:

Usage:
```
pnniNbrDisplay [ -d [ local node index [ neighbor node Id]]]
```

Syntax Element	Description
null	Display summary of all neighbors
-d	Display details of all neighbors
-d *local node index*	Display details of all entries for specified local node
-d *local node index neighbor node Id*	Display details of specified local node with neighbor node

With no options on the command line, the command displays the PNNI node ID and state of its neighbor peers.

Example: In the following sample output, the system recognizes one neighbor node. Its peer state machine considers the link to that neighbor as fully established.

```
admin> pnninbrdisplay
Node PeerState      PeerPortCount
1    Full          1
         PeerNodeId
60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:38:ff:b6:ca:99:00:00:00
```

Field	Indicates
Node	PNNI node index. Only node index 1 is currently supported.
PeerState	State of the local node's neighboring peer state machine associated with PeerNodeId field. The field can display NP Down (neighboring peer is down), Negotiating, Exchanging, Loading, or Full.
PeerPortCount	Total number of ports to the neighboring peer. If the peer communicates only through an SVCC-based RCC, the field displays zero.
PeerNodeId	PNNI node ID of the neighboring peer node.
PeerSvccRccIndex	Identifies the switched virtual channel connection (SVCC)-based routing control channel (RCC) being used to communicate with the neighboring peer. (*SVCC-based RCCs are currently not supported.*) If both the local node and the neighboring peer are lowest-level nodes, the field displays zero.
PeerRcvDbSums	Number of database summary packets received from the neighboring peer.
PeerXmtDbSums	Number of database summary packets transmitted to the neighboring peer.
PeerRcvPtsps	Number of PNNI topology state packet (PSTP)s received from the neighboring peer.
PeerXmtPtsps	Number of PSTPs retransmitted to the neighboring peer.
PeerRcvPtseReq	Number of PNNI topology state element (PTSE) Request packets received from the neighboring peer.
PeerXmtPtseReq	Number of PSTE request packets transmitted to the neighboring peer.
PeerRcvPtseAck	Number of PSTE acknowledgement (ACK) packets received from the neighboring peer.
PeerXmtPtseAck	Number of PSTE acknowledgement packets transmitted to the neighboring peer.

With the −d option, the pnniNbrDisplay command displays additional details about the neighbor node, including statistics about packet exchanges with the neighbor, as shown in the following sample output:

admin> **pnninbrdisplay -d**
Node PeerState   PeerPortCount
1   Full   1

PeerNodeId
60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:38:ff:b6:ca:99:00:00:00

PeerSvcRccIdx PeerRcvDbSums PeerXmtDbSums PeerRcvPtsps PeerXmtPtsps
0   2   3   64   64

PeerRcvPtseReq PeerXmtPtseReq PeerRcvPtseAck PeerXmtPtseAck
0   1   48   7

See Also: PNNIlinkdisplay, PNNIinterfacedisplay, PNNIlinkdisplay, PNNImapdisplay, PNNInodedisplay, PNNInodetopology, PNNIPTSEStatus, PNNIreachableaddr, PNNIroutebase.

PNNInodedisplay

Description: Displays information about factors that affect the operation of the Private Network-to-Network Interface (PNNI) logical node. Stinger unit units support a single logical node, which is always a lowest-level node.

Permission level: System

Usage: pnniNodeDisplay [-d [*local node Id*]]

Syntax Element	Description
null	Show summary of all entries
-d	Show details of all entries
-d *local node index*	Show details of specified entry

With no options on the command line, the command identifies the node and displays some state information.

Example:

admin> **pnninodedisplay**
Node NodeId
1   60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:30:ff:18:dd:98:00:00:00

```
   OperStat    DBOverload    Ptses
   UP          NO            21
```

Field	Indicates
Node	PNNI node index. Only node index 1 is currently supported.
Node Id	PNNI node ID of the local node.
OperStat	Indication of the operational status of the node (Up or Down).
DBOverload	Whether the localnode is currently operating in topology database overload state (Yes or No).
Ptses	Total number of PNNI topology state element (PTSE)s in the node's topology database at this time.
NodeLevel	Indicates the level of PNNI hierarchy at which the node exists. Value is from 0 to 104.
LowestLevel	Whether the node acts as a lowest-level node (Yes or No).

Field	Indicates
AdminStatus	Administrative status of the node. Up indicates that the node is allowed to become active. Down means the node inactive and is not allowed to become active.
DomainName	Name of the local node's PNNI routing domain. All lowest-level nodes with the same domain name are presumed to be connected.
AtmAddress	Local node's ATM address.
PeerGroupId	Local node's peer group ID.
RestrictedTransit	Whether the node is restricted to not allowing support of SVCs transiting this node (Yes or No).
PglLeaderPri	Leadership priority value the local node advertises. With the current software version, zero is displayed, because the node cannot become a peer group leader.
PglState	State of the node regarding peer group leader election with the peer group. Following are valid values:

```
Starting
Awaiting
Awaiting Full
Initial Delay
Calculating
Await Unanimity
Oper PGL
Oper Not PGL
Hung Election
Await Reelection
```

Field	Indicates
PglTimeStamp	Time at which the current peer group leader was established.
PreferredPgl	A node that the local node identifies as the leader of its peer group.
PeerGroupLeader	The current peer group leader.

With the -d option, the command displays many additional fields about the configuration and current state of the logical node. For example:

```
admin> pnninodedisplay -d
Node NodeId
1    60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:30:ff:18:dd:98:00:00:00

     OperStat        DBOverload      Ptses
     UP              NO              21

     NodeLevel       LowestLevel     AdminStatus     DomainName
     96              YES             UP              stinger1r

     AtmAddress
     39:84:0f:80:01:bc:72:00:01:31:a3:99:30:ff:18:dd:98:00:00:00

     PeerGroupId                                     RestrictedTransit
     60:39:84:0f:80:01:bc:72:00:01:31:a3:99:00       NO

     PglLeaderPri    PglState        PglTimeStamp
```

```
0                 Oper not PGL    01/01/1990 00:00:00

PreferredPgl
00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00

PeerGroupLeader
00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00
```

See Also: PNNIlinkdisplay, PNNIinterfacedisplay, PNNIlinkdisplay, PNNImapdisplay, PNNINbrdisplay, PNNInodetopology, PNNIPTSEStatus, PNNIreachableaddr, PNNIroutebase.

PNNInodetopology

Description: Displays the information about nodes that the local node has obtained from nodal information PNNI topology state element (PTSE).

Permission level: System

Usage: pnniNodeTopology [-d [*local node index* [*node Id*]]]

Syntax Element	Description
null	display summary of all Map entries
-d *local node index*	display details of all Map entries
-d *local node index* *node Id*	display details for a single entry for specified local node and map node

Example: With no options on the command line, the command displays the node index and PNNI node ID (map node ID), as shown in the following output:

admin> **pnninodetopology**
Node MapNodeId
1   60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:30:ff:18:dd:98:00:00:00
1   60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:38:ff:b6:ca:99:00:00:00

The MapNodeID field is described in the field descriptors table following the next example.

With the −d option, the command displays additional details about the nodes, as shown in the following sample output:

admin> **pnninodetopology -d**
Node MapNodeId
1   60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:30:ff:18:dd:98:00:00:00

    PeerGroupId
    60:39:84:0f:80:01:bc:72:00:01:31:a3:99:00

    NodeAtmAddress
    39:84:0f:80:01:bc:72:00:01:31:a3:99:30:ff:18:dd:98:00:00:00

```
        RestrictedTransit          NodeComplexRep           RestrictedBranching
        NO                         NO                       NO

        NodeDatabaseOverload       IAMLeader                LeadershipPriority
        NO                         NO                       0

        PreferredPgl
        00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00

        ParentNodeId
        00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00

        ParentAtmAddress
        00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00

        NodeParentPeerGroupId
        00:00:00:00:00:00:00:00:00:00:00:00:00:00

        ParentPglNodeId
        00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00

Node MapNodeId
1    60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:38:ff:b6:ca:99:00:00:00

        PeerGroupId
        60:39:84:0f:80:01:bc:72:00:01:31:a3:99:00

        NodeAtmAddress
        39:84:0f:80:01:bc:72:00:01:31:a3:99:38:ff:b6:ca:99:00:00:00

        RestrictedTransit          NodeComplexRep           RestrictedBranching
        NO                         NO                         NO

        NodeDatabaseOverload       IAMLeader                LeadershipPriority
        NO                         NO                       0

        PreferredPgl
        00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00

        ParentNodeId
        00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00

        ParentAtmAddress
        00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00

        NodeParentPeerGroupId
        00:00:00:00:00:00:00:00:00:00:00:00:00:00
```

```
ParentPglNodeId
00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00
```

Field	Indicates
Node	PNNI node index. Only node index 1 is currently supported.
MapNodeId	PNNI node ID of the node being represented.
PeerGroupId	PNNI peer group ID of the node being represented.
NodeAtmAddress	ATM address of the node being represented.
RestrictedTransit	Whether the node is restricted to not allowing support of switched virtual connection (SVC)s transiting this node (Yes or No).
NodeComplexRep	Whether the node uses complex node representation (Yes or No).
RestrictedBranching	Whether the node is restricted from supporting additional point-to-multipoint branches (Yes or No).
OperStat	Operational status of the node (Up or Down).
NodeDatabaseOverload	Whether the node is currently operating in topology database overload state (Yes or No).
IAmLeader	Whether the originating node claims to be leader of its peer group (Yes or No).
LeadershipPriority	Leadership priority value the node advertises.
PreferredPgl	A node that the local node believes is or should be leader of its peer group.
ParentNodeId	If the node is peer group leader, the node ID of the parent logical group node (LGN). If the node is not peer group leader, it displays zero.
ParentAtmAddress	If the node is peer group leader, the ATM address of the parent LGN. If the node is not peer group leader, it displays zero.
ParentPeerGroupId	If the node is peer group leader, the node's parent peer group ID. If the node is not peer group leader, it displays zero.
ParentPglNodeId	If the node is peer group leader, the node ID of the peer group leader of the parent peer group. If the node is not peer group leader, it displays zero.

See Also: PNNIlinkdisplay, PNNIinterfacedisplay, PNNIlinkdisplay, PNNImapdisplay, PNNINbrdisplay, PNNInodedisplay, PNNIPTSEStatus, PNNIreachableaddr, PNNIroutebase.

PNNIPTSEStatus

Description: Displays the PNNI topology state element (PTSE) in the local node's topology database.

Permission level: System

Usage: pnniPtseStatus [[*orig node Id* [*ptse type*]] | *ptse type*]

Syntax Element	Description
originating node Id	Display details of all entries for specified originating node.
originating node Id ptse type	Display details of all entries for specified originating node and ptse type.
ptse type	Display details of all entries for specified PTSE type. Specify one of following values for the corresponding PTSE types: • -o—Other • -s—Nodal state parameters • -f—Nodal information • -i—Internal address • -e—External address • -h—Horizontal links • -u—Uplinks

Example: With no options on the command line, the command displays the current topology database:

```
admin> pnniptsestatus
OrigNodeId
60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:30:ff:18:dd:98:00:00:00
```

Node	PtseId (hex)	SeqNum	LifeTime	CheckSum	PtseType
1	1	47	3600	11143	NodalInfo
1	2	60	3600	51918	InternalAddr
1	4	2	3600	46441	HorizontalLink
1	5	4	3600	7165	InternalAddr
1	6	3	3600	52636	InternalAddr
1	7	2	3600	15160	InternalAddr
1	8	3	3600	61997	InternalAddr
1	9	8	3600	62930	InternalAddr
1	a	5	3600	25143	InternalAddr
1	b	4	3600	12231	InternalAddr

1	c	10	3600	37892	InternalAddr
1	d	10	3600	37791	InternalAddr
1	e	9	3600	37691	InternalAddr
1	11	1	3600	6042	InternalAddr

OrigNodeId
60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:38:ff:b6:ca:99:00:00:00

Node	PtseId (hex)	SeqNum	LifeTime	CheckSum	PtseType
1	1	43	3308	56751	NodalInfo
1	2	50	1658	43086	InternalAddr
1	4	41	2678	33703	InternalAddr
1	5	43	2145	33718	InternalAddr
1	6	43	2061	33721	InternalAddr
1	7	42	1850	33667	InternalAddr
1	a	2	3301	46435	HorizontalLink

Field	Indicates
OrigNodeId	PNNI node ID of the node that originated the PTSE.
Node	Local node number.
PtseId	Hexadecimal value of the PTSE identifier assigned to the PTSE by the originating node.
SeqNum	Sequence of the entry in the local topology database.
LifeTime	Remaining lifetime for the given PTSE as stated in the topology database.
Checksum	The entry's PTSE checksum as stated in the topology database.
PtseType	Type of information contained in the PTSE entry. Valid values are `Other`, `NodalState`, `NodalInfo`, `InternalAddr`, `ExteriorAddr`, `HorizontalLinks`, and `Uplinks`.

You can specify an originating node ID on the command line, use an option to retrieve information only about a specific PTSE type, or to retrieve specific PTSE types originated by a specific node. For example, the following sample command displays information only about horizontal link PTSEs:

admin> **pnniptsestatus -h**
OrigNodeId
60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:30:ff:18:dd:98:00:00:00

Node	PtseId (hex)	SeqNum	LifeTime	CheckSum	PtseType
1	4	2	3600	46441	HorizontalLink

OrigNodeId
60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:38:ff:b6:ca:99:00:00:00

```
Node PtseId (hex)   SeqNum   LifeTime  CheckSum      PtseType
1    a          2      3301     46435        HorizontalLink
```

See Also: PNNIlinkdisplay, PNNIinterfacedisplay, PNNIlinkdisplay, PNNImapdisplay, PNNINbrdisplay, PNNInodedisplay, PNNIPTSEStatus, PNNIreachableaddr, PNNIroutebase.

PNNIreachableaddr

Description: Displays a list of all reachable addresses from each node visible to the local node in the Private Network-to-Network Interface (PNNI).

Permission level: System

Usage: pnniReachableAddr [-n *node Id*] | [-a *address*]

Syntax Element	Description
null	Display all reachable address entries
-n *node Id*	Display for a given node all reachable addresses
-a *address*	Display for a given address all entries that match

Example: With no options on the command line, the command prints the entire list of reachable addresses. Below is an excerpt showing a few entries from sample output:

admin> **pnnireachableaddr**
AdvertisedNodeId
60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:30:ff:18:dd:98:00:00:00

```
PortId        Index         PrefixLength (bits)
36610         2             152
```

ReachableAddr
39:84:0f:80:01:bc:72:00:01:18:dd:98:00:ff:18:dd:98:00:02

AdvertisedNodeId
60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:30:ff:18:dd:98:00:00:00

```
PortId        Index         PrefixLength (bits)
36610         3             152
```

ReachableAddr
39:84:0f:80:01:bc:72:00:01:18:dd:98:00:ff:18:dd:98:00:f1

AdvertisedNodeId
60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:30:ff:18:dd:98:00:00:00

```
PortId        Index         PrefixLength (bits)
36610         4             152
```

ReachableAddr

39:84:0f:80:01:bc:72:00:01:18:dd:98:00:ff:18:dd:98:00:f2

AdvertisedNodeId
60:a0:39:84:0f:80:01:bc:72:00:01:31:a3:99:30:ff:18:dd:98:00:00:00

PortId	Index	PrefixLength (bits)
36610	5	152

ReachableAddr
39:84:0f:80:01:bc:72:00:01:18:dd:98:00:ff:f7:48:cf:3b:01

You can use a command option to display reachable addresses from a specified node or ATM address. For example, the following output shows addresses that are reachable from the specified ATM prefix:

Field	Indicates
AdvertisingNodeId	PNNI node ID of a node that advertises reachability to the ATM prefix displayed in the ReachableAddr field. Displayed in hexadecimal.
PortId	Port ID used by the advertising node to reach the ATM prefix displayed in the ReachableAddr field.
Index	Arbitrary index used to enumerate the addresses advertised by the advertising node.
PrefixLength	Number of significant bits in the prefix displayed in the ReachableAddr field.
ReachableAddress	ATM prefix of the reachable address. Displayed in hexadecimal.

```
admin> pnnireachableaddr -a 39:84:0f:80:01:bc:72:00:01:17:fd:27:09
AdvertisedNodeId
60:a0:39:84:0f:80:01:bc:72:00:01:17:fd:27:09:ff:e8:71:75:03:00:00

    PortId                  Index                   PrefixLength (bits)
    0                       1                       104

    ReachableAddr
    39:84:0f:80:01:bc:72:00:01:17:fd:27:09
```

See Also: PNNIlinkdisplay, PNNIinterfacedisplay, PNNIlinkdisplay, PNNImapdisplay, PNNINbrdisplay, PNNInodedisplay, PNNInodetopology, PNNIPTSEStatus, PNNIroutebase.

PNNIroutebase

Description: Displays the number of current Private Network-to-Network Interface (PNNI) routes from nodes in the PNNI routing domain to valid addresses and transit networks.

Permission level: System

Example:

admin> **pnniroutebase**
pnniRouteAddrNumber   = 161

See Also: PNNIlinkdisplay, PNNIinterfacedisplay, PNNIlinkdisplay, PNNImapdisplay, PNNINbrdisplay, PNNInodedisplay, PNNInodetopology, PNNIPTSEStatus, PNNIreachableaddr.

Quit

Description: Terminates the current Telnet session.

Permission level: User

Usage: quit

Example: To terminate the current Telnet session:

```
admin> quit
Connection closed by foreign host.
my-station%
```

Read

Description: Reads a copy of the specified profile into the edit buffer, making it the working profile. If the profile is one of a kind, such as the IP-Global profile, it has no index field. If an index field exists for a profile, it must be specified on the command line.

Only the working profile can be modified. The Set and List commands apply only to the working profile.

Note: The working profile remains in the edit buffer until you overwrite the buffer with another Read command or the New command. To save changes made in the buffer, you must use the Write command.

Permission level: System

Usage: read *profile-type* [*profile-index*][-f]

Syntax element	Description
profile-type	The type of profile to be read (or the profile itself if it does not require an index specification).
profile-index	The name or address that distinguishes a profile from others of the same type. To see profile indexes, enter the Dir command (dir profile-type).
-f	Do not prompt for confirmation when overwriting the unsaved contents of the edit buffer.

By default, when you issue a Read command that would overwrite the contents of the edit buffer when the buffer contains unsaved changes, the system displays a message prompting for confirmation. For example:

```
admin> read connection david
Reading will overwrite the changes you've made.
Read anyway? [y/n] y
CONNECTION/david read
```

You can avoid this prompt by using the −f flag on the Read command line.

Example: To find the right index for an IP-Interface profile, read that profile, and list its contents:

```
admin> dir ip-interface
66  12/20/1998 14:02:02  { { shelf-1 slot-12 1 } 0 }
66  12/27/1998 16:34:40  { { shelf-1 slot-12 2 } 0 }
66  12/27/1998 16:34:47  { { shelf-1 slot-12 3 } 0 }
66  12/27/1998 16:34:54  { { shelf-1 slot-12 4 } 0 }
66  12/28/1998 00:21:06  { { shelf-1 controller 1 } 0 }

admin> read ip-int {{1 c 1} 0}
IP-INTERFACE/{ { shelf-1 controller 1 } 0 } read

admin> list
[in IP-INTERFACE/{ { Shelf-1 controller 1} 0 }]
interface-address*={ { shelf-1 controller 1 } 0 }
ip-address=10.6.212.227/24
rip-mode=routing-send-and-recv
```

The profile remains in the edit buffer until another Read command or a New command overwrites the buffer. The Set command modifies the profile. The Write command saves changes without clearing the buffer.

```
admin> set ip-address=10.6.212.228/24

admin> write
IP-INTERFACE/{ { shelf-1 controller 1 } 0 } written
```

The working profile is represented by a period (.) character. Even after you have used the Get command to display other profiles, or have executed other commands, you can still use the Get command to display the working profile:

```
admin> get .
[in IP-INTERFACE/{ { Shelf-1 controller 1} 0 }]
interface-address*={ { shelf-1 controller 1 } 0 }
ip-address=10.6.212.228/24
rip-mode=routing-send-and-recv
```

See Also: Get, List, New, Set, Write

Rearslotshow

Description: Displays the state of the cards in the rear slot and the midplane sparing bus usage.

Usage: rearSlotShow

Example:

```
techpubs> rearslotshow
Slot    Slot ID
```

```
[  1 ]     0   Empty ( IRM, LPM )
[  2 ]     0   Empty ( IRM, LPM )
[  3 ]     0   Empty ( IRM, LPM )
[  4 ]     0   Empty ( IRM, LPM )
[  5 ]     0   Empty ( IRM, LPM )
[  6 ]     0   Empty ( IRM, LPM )
[  7 ]     0   Empty ( IRM, LPM )
[ 10 ]     0   Empty ( IRM, LPM )
[ 11 ]     0   Empty ( IRM, LPM )
[ 12 ]     0   Empty ( IRM, LPM )
[ 13 ]     0   Empty ( IRM, LPM )
[ 14 ]     0   Empty ( IRM, LPM )
[ 15 ]     0   Empty ( IRM, LPM )
[ 16 ]     0   Empty ( IRM, LPM ))


Midplane sparing bus usage :
4            4            3            2            1
8765 4321 0987 6543 2109 8765 4321 0987 6543 2109 8765 4321
.... .... .... .... .... .... .... .... .... .... .... ....
```

See Also: Slot-Info (profile), Slot-State (profile), Slot-Type (profile)

Redundant-Controller-Switch

Description: Enables you to make the secondary controller module primary. If two controller modules are available, then one of them is the *primary*, the other one the *secondary* controller. At start-up time both controllers negotiate for one of them to become the primary. The user can influence this process by setting the primary-preference flag in the Redundancy profile to the slot number of the controller that will become primary in the case when two controllers are present. If the primary fails then the secondary automatically takes over control of the system. In this case the new primary deactivates all slot modules and reactivates the system.

Permission level: System

Usage: `redundant-controller-switch [-f]`

The -f option forces a switchover.

Following are examples of executing this command from controllers in various conditons.

Command executed on secondary controller:

```
admin> redundant-controller-switch
This controller is not the PRIMARY, it does not own the bus !
```

Command on primary when secondary is not asking to be primary

```
admin> redundant-controller-switch
The remote controller is not requesting the bus,
it cannot become PRIMARY !
```

Command executed on primary when there is only one controller:

```
admin> redundant-controller-switch
There is no remote controller !
```

See Also: Controller-Static-Config (profile), Primary-Preference, Redundancy (profile), Red-Prof-Sync

Red-Prof-Sync

Description: Forces profile context to be transferred from the *primary* to the *secondary* control module. Enables you to synchronize the redundant control module (CM) profile context at any moment— not just while saving the profile by executing the command "write."

Permission level: System

Usage: `red-prof-sync`

Example:

```
super>red-prof-sync
super>
Primary Controller: profile transfer to Secondary Controller
completed
```

See Also: Controller-Static-Config (profile), Primary-Preference, Redundancy (profile)

Refresh

Description: Opens a connection to a RADIUS server and retrieves the latest configuration information.

Permission level: System

Usage: `refresh -a|-n|-p|-r|-t`

Option	Description
`-a`	Refresh all types of configuration.
`-n`	Refresh nailed profiles configuration.
`-r`	Refresh static routes configuration.
`-t`	Refresh terminal server configuration.
`-s`	Clears the current Source Auth information (purging all existing Source Auth entries from the cache) and reloads it from RADIUS.

See Also: Auth-Boot-Host, Rad-Auth-Client

Reset

Description: Resets the Stinger unit. When you reset the unit, it restarts, and all active connections are terminated. All users are logged out and the default security level is reactivated. In addition, a system reset can cause a WAN line to temporarily be shut down due to momentary loss of signaling or framing information. After a reset, the Stinger unit runs POST (power-on self tests).

Permission level: Update

Usage: reset [-f]
Using the -f option forces a reset without prompting for confirmation.

Example: reset -f

See Also: NVRAM

Save

Description: Saves configuration information to a file. The file can reside either on the hard disk of the PC you are using to issue commands to the Stinger unit or on a networked host. The file is saved in a format that can be loaded into the Stinger unit to restore a configuration. The Save command uses TFTP to transfer the configuration across the network. To save the Stinger unit configuration on a remote host, you must have the necessary permissions in the directory.

Permission level: Update

Usage: save [-a|-m] target [*profile-type* [*profile-index*]]

Syntax element	Description
-a	Explicitly save all fields, even those with default values. If you do not specify this option, the file stores only those fields whose values have been changed from the default.
-m	Use MIB tags instead of field and value names, and use profile-type numbers rather than profile-type text names.
target	The destination of the file to be saved. Valid specifications are: • network host filename— A network hostname or IP address and the path to the file on that host. • console— The PC you are using in a terminal session.
profile-type	The type of profile to be read, or the profile itself if it does not require an index specification.
profile-index	The name or address that distinguishes a profile from others of the same type. To see profile indexes, enter the Dir command (dir *profile-type*).

Example: Saving all Connection profiles to a file on a PC's hard disk (after starting the capture utility in the VT100 emulation software):

Note: Most Telnet utilities have a capture function, for example Telnet.cfg has a Capture function under the File menu. Start the capture before issuing the Save command, and end the capture after the terminal display has ended.

```
admin> save console connection
; saving profiles of type CONNECTION
; profile saved Thu Jan 2 13:02:54 1999
new CONNECTION dallas
set active=yes
set ip-options remote-address=10.122.99.1/24
write -f
;
```

```
; profile saved Thu Jan 2 13:02:54 1999
new CONNECTION chicago
set active=yes
set dial-number=999
set ip-options remote-address=10.168.6.57/24
set ip-options routing-metric=2
write -f
;
```

To save the file, stop the capture in the VT100 emulation software. To save the entire configuration to hard disk, start the capture utility and specify the `console` option:

```
admin> save console
; saving all profiles
...
```

All configured profiles and parameters scroll to the capture buffer. When the entire configuration has been displayed, the following output appears:

```
;
;
; all profiles saved
```

To save the file, stop the capture. The following example shows how to save a specific profile to a file on a network host:

```
admin> save network host-231 /users/marcel/ipglobal ip-g
configuration being saved to 10.65.12.231
file /users/marcel/ipglobal...save
admin>
```

The following example shows how to specify a profile type by its internal number when saving:

```
admin> save -m console system
; saving profiles of type SYSTEM
; profile saved Sat Mar 29 13:29:42 1998
new 3
set 1=1
set 2=eng-lab-43
write -f
```

Note: If the first item following a New, Read, or Dir command is numeric, it is assumed to be a profile-type number.

See Also: Load, NVRAM

Screen

Description: Changes window display sizes for the current session only.

Permission level: Update

Usage: screen [*screen-length*] [*status-length*] [-w *width*]

Syntax element	Description
screen-length	The number of lines displayed in the command-line window. The default is 24 lines, which is the minimum size. The maximum size is 999 lines
status-length	The number of lines displayed in the Status window, including dividing lines. The default is 18 lines, which is the minimum size. The maximum size is 993 lines. The status-length value must be less than the screen-length by at least six lines
-w width	A value from 80 to 256. The default is 80.

If the Status window is open when you execute the Screen command, the window is resized dynamically. If it is not open, the Status window is resized when you next open it.

Example: admin> **screen 55 22**

If only the *screen-length* argument is specified, and the stored *status-length* is not less than the specified value by six lines, the *status-length* is automatically adjusted. This scenario is demonstrated in the following example:

```
admin> screen 55 22
new screen-length 55
new status-length 22

admin> screen 24
error: screen-length conflict, adjusting status-length from 22
to 18
new screen-length 24
new status-length 18
```

The Screen command enables you to specify the width of the screen. For example, the following command sets the screen width to 256 characters:

```
admin> screen -w 256
```

The specified screen width is the number of characters that are visible without scrolling, including the system prompt and spaces following it.

For example, if the screen width is 80 characters and the prompt is admin> (a 6-character prompt followed by a space), the maximum number of visible characters in a command is 72. If you enter a long command (for example, one that has 100 characters), 28 of the characters are not visible at any one time. You can scroll to the characters not currently visible by moving the cursor left or right. The Ctrl-L, Ctrl-R control sequence allows you to redraw the current line.

For details, see the *Taos Command-Line Interface Guide*.

See Also: Screen-Length, Screen-Width

SDSLlines

Description: Displays SDSL channel information.

Permission level: System

Usage: sdsllines -a|-d|-f|-u

Option	Description
-a	Display all available channels.
-d	Display all disabled channels.
-f	Display all possible channels.
-u	Display all in-use channels.

Example: To display all SDSL channels available, use the -a option:

```
admin> sdsllines -a

All SDSL lines:
                                (dvOp    dvUpSt    dvRq    sAdm    nailg)
  Line    {    1  3   1 }       (Up      Idle      UP      UP      00001)
  Line    {    1  3   2 }       (Up      Assigned  UP      UP      00002)
  Line    {    1  3   3 }       (Up      Assigned  UP      UP      00003)
  Line    {    1  3   4 }       (Up      Idle      UP      UP      00004)
  Line    {    1  3   5 }       (Up      Idle      UP      UP      00005)
  Line    {    1  3   6 }       (Up      Assigned  UP      UP      00006)
  Line    {    1  3   7 }       (Up      Idle      UP      UP      00007)
  Line    {    1  3   8 }       (Up      Assigned  UP      UP      00008)
  Line    {    1  3   9 }       (Up      Assigned  UP      UP      00009)
  Line    {    1  3  10 }       (Up      Assigned  UP      UP      00010)
  Line    {    1  3  11 }       (Up      Assigned  UP      UP      00011)
  Line    {    1  3  12 }       (Up      Assigned  UP      UP      00012)
  Line    {    1  3  13 }       (Up      Assigned  UP      UP      00013)
  Line    {    1  3  14 }       (Up      Assigned  UP      UP      00014)
  Line    {    1  3  15 }       (Up      Assigned  UP      UP      00015)
  Line    {    1  3  16 }       (Up      Idle      UP      UP      00016)
```

The data displayed includes the physical address and channel number, and the following status information about each channel:

Column	Description
dvOp	The current operational state of the channel (also specified by the Device-State parameter): • Down—Indicates that the channel is in a nonoperational state. • Up—Indicates that the channel is in normal operation mode.
dvUpSt	The status of the channel in normal operation mode: • Idle—Indicates that no call is on the line. • Active—Indicates that the channel is handling a call.

Column	Description
dvRq	The required state of the channel as specified by the Reqd-State setting:

- Down—Indicates that the channel is required to be nonoperational.
- Up—Indicates that the channel is required to be in normal operation mode.

sAdm	The desired administrative state of the line:

- Down—Indicates that the line should terminate all operations and enter the deactivated state.
- Up—Indicates that the line should be activated in normal operations mode.

The actual state of the line can differ from the desired state, as when a device is powering up, or you change the desired state on a running slot. Changing the desired state does not automatically change a line to the desired state. It indicates that an operation has been initiated that should change the Stinger unit to the state desired.

nailg	The dedicated (nailed) group to which the line is assigned.

See Also: Device-State (profile), Device-State

Set

Description: Sets a parameter's value or displays help text for a parameter in the current or specified context of the working profile. To save the new setting, you must write the profile.

Permission level: System

Usage: `set param-name [`*param-index*`] [`*subprofile*`] ` *value*`|?`

Syntax element	Description
param-name	Name of the parameter in the current or specified context of the working profile.
param-index	Parameter index, which might be required for some complex or array parameters. (See the Physical-Address parameter example.)
subprofile	Subprofile name within the working profile. By specifying its name on the command line, you can set a parameter in a subprofile without opening the subprofile. For example, `set ip-options ip-routing-enabled = yes`
value	Legal parameter value.
?	Display help text about the specified parameter.

See Also: List, New, Physical-Address, Read, Write

Show

Description: Displays information about modules and their status.

Permission level: System

Usage: show *shelf-number* [*slot-number* [*item-number*]]

Syntax element	Description
shelf-number	The number of a Stinger unit shelf.
slot-number	The number of an expansion slot in the specified shelf (1–16).
item-number	The number of a specific item (device or channel) on the module.

Example: To display all installed modules:

```
admin> show 1
Shelf 1 ( standalone ):
    { shelf-1 slot-4 0 }        UP        al-dmtadsl-atm-card
    { shelf-1 slot-6 0 }        UP        sdsl-atm-card
```

The output includes the address of each slot in which an expansion module is installed, the status of the module, and the type of module installed. The status can be one of the following:

Status	Description
UP	Normal operational mode. The module is activated and running.
DOWN	Not in an operational mode. The module has shut down all functions and can be deactivated by the shelf controller.
POST	The download is complete, and the devices in the module are running power-on self tests.
BOOT	The module is running BOOT code. Under normal conditions, the LOAD status follows.
LOAD	The module is loading code as part of coming up.
RESET	The module is being reset.
NONE	The module has been swapped out, but its configuration remains in flash space.
OCCUPIED	The module is using two slots.

See Also: Device, Slot

Slot

Description: Changes the administrative state of a module, forcing a state change (up or down). The down state allows temporary removal of a module without the loss of its configuration.

Permission level: Diagnostic

Usage: `slot -u|-d|-r|-t|-b|? [`*`shelf-number`*`]` *`slot-number`*`]`

Syntax element	Description
`-u`	Activate the specified slot module.
`-d`	Deactivate the specified slot module.
`-r`	Delete the profiles for a module that has been removed.
`-t`	Toggle module debug level.
`-b`	Force hardware reset.
`-w`	Change or display watchdog failure limit.
`-?`	Display a usage summary.
`shelf-number`	The number of a Stinger unit shelf.
`slot-number`	The number of an expansion slot in the specified shelf (1through 16).

Note: The Stinger generates new Syslog records when you use the following commands:

• `slot -b` (reset a module)

• `slot -d` (stop operation of a module)

• `slot -u` (start operation of a module)

When you use `slot -b` or `slot -d`, the Stinger generates new nonvolatile RAM (NVRAM) records as well.

Example: To bring up the expansion module in slot 5:

```
admin> slot -u 5
slot 1/5 state change forced
```

In the next example, a module has been removed, as indicated by a status of NONE in the output of the Show command:

```
admin> show 1 4
Shelf 1 ( standalone ):
    { shelf-1 slot-4 0 }         UP        al-dmtadsl-atm-card:
    { shelf-1 slot-4 1 }         UP          xdsl-12-line1
    { shelf-1 slot-4 2 }         UP          xdsl-12-line-2
    { shelf-1 slot-4 3 }         UP          xdsl-12-line-3
    { shelf-1 slot-4 4 }         UP          xdsl-12-line-4
    { shelf-1 slot-4 5 }         UP          xdsl-12-line-5
    { shelf-1 slot-4 6 }         UP          xdsl-12-line-6
    { shelf-1 slot-4 7 }         UP          xdsl-12-line-7
    { shelf-1 slot-4 8 }         UP          xdsl-12-line-8
    { shelf-1 slot-4 9 }         UP          xdsl-12-line-9
    { shelf-1 slot-4 10 }        UP          xdsl-12-line-10
    { shelf-1 slot-4 11 }        UP          xdsl-12-line-11
    { shelf-1 slot-4 12 }        NONE        xdsl-12-line-12
    { shelf-1 slot-4 13 }                  xdsl-12-virt-dev
```

The NONE status indicates that the module was removed but that its profiles have been saved. The Stinger unit remembers that a module was in that slot and saves its profiles until a module of a different type is installed in the same slot, or until you delete the profile:

```
admin> slot -r 4
slot 1/4 removed
```

Either action deletes all the old profiles associated with the slot. When you insert a different type of module, the system creates appropriate new profiles.

See Also: Device, Open, Show

SNMPauthpass

Description: Generates the authentication key of an SNMPv3 USM user.

Permission level: Update

Usage: snmpAuthPass *username password*

Argument	Description
username	SNMPv3 USM user for whom an authentication key is generated.
password	Password for generating the authentication key.

The SNMPauthpass command can accept a username in escape sequence format.

Example: To generate the authentication key of the user robin with the password abc123:

```
admin> snmpauthpass robin abc123
```

Dependencies: The password you specify is not stored in the system. It is used to generate an authentication key when the user is authenticated. The key is stored in the system.

See Also: SNMPprivpass

SNMPprivpass

Description: Generates the privacy key of an SNMPv3 USM user.

Permission level: Update

Usage: snmpPrivPass *username password*

Argument	Description
username	SNMPv3 USM user for whom a privacy key is generated.
password	Password for generating the privacy key.

The SNMPprivpass command can accept a username in escape sequence format.

Example: To generate the privacy key of the user robin with the password abc123:

```
admin> snmpprivpass robin abc123
```

Dependencies: The password you specify is not stored in the system. It is used to generate a privacy key when the user is authenticated. The key is stored in the system.

SNTP

Description: Simple Network Time Protocol (SNTP) is a protocol that enables a group of servers to synchronize their clocks with reference to a primary time server. The SNTP server retrieves the correct time from an official source and distributes the information to other servers and networks. The SNTP command displays statistics concerning the state of the SNTP server.

Permission level: System

Usage: sntp -d

Example:

```
techpubs> sntp -d
SNTP:
mode: disabled, threshold: 10
max delta: 0, last Delta: 0
waiting for first update
system start time: Wed Oct 11 15:18:40 2000
original system start time: Wed Oct 11 15:18:40 2000
SNMP start delta: 5
SNMP trap sent: 0
time left for next request: 0 sec
```

SPVCC

Description: Displays Asynchronous Transfer Mode (ATM) soft permanent virtual channel connection (SPVCC) statistics.

Permission level: System

Usage: spvcc -[a|s|p|d] *slot port vpi*

Argument	Description
-a	Show all ATM soft PVCC entries.
-s *slot*	Show ATM soft PVCC entries by slot.
-p *slot port*	Show ATM soft PVCC entries by slot and port.
-d *slot port vpi*	Show detailed ATM soft PVCC info.

Example: Following are two examples of the spvcc command.

```
admin> spvcc -a
Profile Intf/Slot/Port/ VPI/ VCI/targVPI/targVCI TargSel OStatus
spvc1  16 1 2         0    32 0        33      req    inProg
.....
admin> spvcc -d 16 2 0
```

```
Profile = ray-1
Physical Address = { 1 1 2 }
Interface = 16
OperStatus = inProg
VCL Vpi = 0
VCL Vci = 32
TargetSelect = req
TargetVpi = 0
TargetVci = 33
Target ATM address =
47.41.0.31.0.31.0.31.0.31.0.31.11.22.33.44.55.66.0.0
LastReleaseCause = 3
LastReleaseDiagnostic = 81
RetryFailures = 19
RetryInterval = 10
RetryTimer = 7
RetryThreshold = 1
RetryLimit = 0
```

SPVPC

Description: Displays Asynchronous Transfer Mode (ATM) soft permanent virtual path connection (SPVPC) statistics.

Permission level: System

Usage: spvpc -[a|s|p|d] *slot   port   vpi*

Argument	Description
-a	Show all ATM soft PVPC entries.
-s *slot*	Show ATM soft PVPC entries by slot.
-p *slot port*	Show ATM soft PVPC entries by slot and port.
-d *slot port vpi*	Show detailed ATM soft PVPC info.

Example:
```
admin> spvpc -a
Profile     Intf/Slot/Port/ VPI/  targVPI TargSel OStatus
spvc-init-1 16 18 2            5     0       req    inProg

....
admin> spvpc -d 18 2 5

Profile = spvc-init-1
Physical Address = { 1 18 2 }
OperStatus = inProg
VCL Vpi = 5
TargetSelect = req
TargetVpi = 0
Target ATM address =
47.41.0.31.0.31.0.31.0.31.0.31.11.22.33.44.55.66.0.0.
```

```
                   LastReleaseCause = 3
                   LastReleaseDiagnostic = 81
                   RetryFailures = 10
                   RetryInterval = 10
                   RetryTimer = 5
                   RetryThreshold = 1
                   RetryLimit = 0
```

SPVCstat

Description: Show overall soft permanent virtual channel (PVC) and permanent virtual path (PVP) information.

Permission level: System

Usage: spvcstat

Example:

```
admin> spvcstat

Call Failures = 88
Currently Failing PVCCs = 1
Currently Failing PVPCs = 1
```

Status

Description: Displays the status windows. You can configure the content of the windows to show connection, line, or log-message information. For detailed information, see the *Stinger Administration Guide*.

Permission level: System

Usage: status [on|off]

Syntax element	Description
on	Display the status windows.
off	Hide the status windows.

Example: To display status windows:

```
admin> status
```

or

```
admin> status on
```

```
 2 Connections                    Status
001 tomw TCP 1/7/14 19200         Serial number: 6201732    Version: 1.0F
002 timl TCP  1/7/3  56000
                                   Rx Pkt:    11185897
                                   Tx Pkt:      42460
                                     Col:         129

                                  12/26/1998 12:20:15  Up:    3 days, 21:47:32

                                  M: 29 L: info Src: shelf-1/controller




                                        Issued: 16:48:02, 09/27/1998
```

[Next/Last Conn: <dn/up arw>, Next?Last Page: <pg dn/up>, Exit: <esc>]

To hide the windows:

admin> **status**

or

admin> **status off**

See Also: Connection, Log, View

Telnet

Description: Opens a Telnet session across the network to the specified host.

Permission level: Diagnostic

Usage: telnet [-a|-b|-t][-l[e]|-r[e]] *hostname* [*portnumber*]

Syntax element	Description
-a	ASCII mode, or standard seven-bit mode. In seven-bit mode, bit eight is set to 0 (zero). This value is the default if no other mode is specified.
-b	Binary mode. The Stinger unit attempts to negotiate the Telnet 8-bit binary option with the server at the remote end. You can run X-Modem and other eight-bit file transfer protocols in this mode.
-t	Transparent mode. You can send and receive binary files, and run the same file-transfer protocols, without having to be in Binary mode.
-l[e]	Local echo. As you type a line, it echoes on your terminal screen, but is not actually transmitted until you enter a carriage return.
-r[e]	Remote echo. Turn local echo off.
hostname	The IP address or DNS name of a networked host.
portnumber	A port number for Telnet sessions. The default port is 23.

Example: To open a Telnet session to Host-231:

```
admin> telnet host-231
Connecting to host-231 (10.65.12.231)...
Escape character is '^]'
Connected
```

You can also open a session after starting the Telnet program. To display the available commands:

```
admin> telnet

telnet> ?
?                  Displays this information.
help                    "     "          "
open               Connect to a site.
quit               Quit Telnet.
close              Close current Telnet connection.
send               Send Telnet command. Type 'send ?' for help.
set                Set special char. Type 'set ?' for help.
```

Note: During an open Telnet connection, type Ctrl-] to display the telnet> prompt and the Telnet command-line interface. Any valid Telnet command returns you to the open session. Note that Ctrl-] does not function in binary mode Telnet. If you log into the Stinger unit by Telnet, you might want to change its escape sequence from Ctrl-] to a different setting.

See Also: Ping

Terminal-Server

Description: Starts terminal-server mode, which has its own command interface.

Permission level: Termserv

Usage: `terminal-server`

Example: To enter terminal-server mode and display the list of available commands:

```
admin> terminal-server
admin% ?
?                  Display help information
help                    "     "          "
quit               Closes terminal server session
hangup                  "     "      "       "
local              Go to local mode
remote             remote <station>
set                Set various items. Type 'set ?' for help
show               Show various tables. Type 'show ?' for help
iproute            Manage IP routes. Type 'iproute ?' for help
telnet             telnet [-a|-b|-t] <host-name> [<port-number>]
tcp                tcp <host-name> <port-number>
ping               ping <host-name>
traceroute         Trace route to host. Type 'traceroute -?' for help
rlogin             rlogin [-l user -ec] <host-name>
```

To exit terminal server mode:

```
admin% quit
```

```
admin>
```

See Also: Ping, Telnet

Traceroute

Description: Traces the route an IP packet follows by launching UDP probe packets with a low Time-To-Live (TTL) value and then listening for an ICMP *time exceeded* reply from a router. Probes start with a TTL of one and increase by one until either a probe packet reaches the destination host or the TTL reaches the maximum.

Three probes are sent at each TTL setting. The second line of command output shows the address of the router and round-trip time of each probe. If the probe answers come from different gateways, the address of each responding system is printed. If there is no response within a 3-second timeout interval, the command output is an asterisk.

The destination host is not supposed to process the UDP probe packets, so the destination port is set to an unlikely value, such as 33434. When the packets reach the destination host, it sends back an ICMP port unreachable message.

Permission level: Diagnostic

Usage: traceroute [-n] [-v] [-m *max_ttl*] [-p *port*] [-q *nqueries*] [-w *waittime*] [-s *src_IPaddr*] *hostname* [*datasize*]

Syntax element	Description
-n	Print hop addresses numerically rather than symbolically and numerically (this eliminates a nameserver address-to-name lookup for each gateway found on the path).
-v	Verbose output. Include received ICMP packets other than Time Exceeded and ICMP Port Unreachable.
-m *max_ttl*	Set the maximum time-to-live (maximum number of hops) used in outgoing probe packets. The default is 30 hops.
-p *port*	Set the base UDP port number used in probes. If a device is listening on a port in the default range, this option can be used to pick an unused port range. The default is 33434.
-q *nqueries*	Set the maximum number of queries for each hop. The default is 3.
-w *waittime*	Set the time to wait for a response to a query. The default is 3 seconds.
-s *src_IPaddr*	The IP address of the source host.
hostname	The IP address or DNS name of a networked host.
datasize	Set the size of the data field of the UDP probe datagram sent by Traceroute. The default is 0. This results in a datagram size of 38 bytes (a UDP packet carrying no data).

Example: To trace the route to Host-231:

```
admin> traceroute host-231
traceroute to host-231 (10.65.12.231), 30 hops max, 0 byte packets
 1  host-231.abc.com (10.65.12.231)  0 ms  0 ms  0 ms
```

To perform the same trace, but with a maximum TTL of 60 hops:

```
admin> traceroute -m 60 host-231
traceroute to host-231 (10.65.12.231), 60 hops max, 0 byte packets
 1  host-231.abc.com (10.65.12.231)  0 ms  0 ms  0 ms
```

The following annotations can appear in the command output after the time field:

Annotation	Description
!H	Host reached.
!N	Network unreachable.
!P	Protocol unreachable.
!S	Source route failed. Occurrence of this event might indicate that there is a problem with the associated device.
!F	Fragmentation needed. Occurrence of this event might might indicate that there is a problem with the associated device.
!?	An ICMP subcode. The event indicates an error.
!??	Reply received with inappropriate type. The event indicates an error.

See Also: Ping, Netstat

Uptime

Description: Reports how long the system has been up and how long individual modules have been up.

Permission level: System

Usage: uptime [[-a]|[[*shelf*] *slot*]]

Syntax element	Description
Null	Display the system uptime.
-a	Display the time all modules in the up state have been active (Up).
slot	Display the amount of time for the specified module on the master shelf has been active (Up).
shelf slot	Display the amount of time for the module specified by shelf and slot have been active (Up).

Example: The following example shows the amount of time for all modules in the Up state have been active. (Cards that are not in the Up state are not reported.)

admin> **uptime -a**
17:50:44
{ shelf-1 slot-4 } al-dmtadsl-atm-card   0 days   02:45:42   8.0a0e0
{ shelf-1 slot-6 } sdsl-atm-card   0 days   02:45:48   8.0a0e0
{ shelf-1 control-module} shelf-controller   0 days   02:47:05   8.0a0e0

Note: To enable network management stations to obtain uptime information, the following SNMP variable has been added to the Ascend Enterprise MIB:

```
slotLastChange    OBJECT-TYPE
     SYNTAX       TimeTicks
     ACCESS       read-only
     STATUS       mandatory
     DESCRIPTION "The value of sysUpTime at the time the slot card
                  entered its current state."
     ::= { slotEntry 9 }
```

The slotLastChange variable reports the value of sysUpTime at the time the module entered its current state.

Userstat

Description: Displays user session status.

Permission level: System

Usage: userstat [[-s| -k *sessionID*| -a *ipaddress*|-u *username*|-l|-d] [*format*]]

Option	Description
-s	Show users (default)
-k *sessionID*	Kill a user session
-a *ipAddress*	Show the session with matching Ipaddress
-u *username*	Show the session with matching Username
-l	Wide format (more than 80 characters)
-d	Dump, do not pass output through more format values

format	One or More of the following format characters (in each case preceded by the percent (%) sign) can be entered:

```
%i—SessionID

%l—Line/Chan

%s—Slot:Item

%r—Tx/Rx Rate

%d—Type of Service

%a—Address

%u—Username

%c—ConnTime

%t—IdleTime

%n—Dialed#
```

Note: The default format setting includes all the character settings: %i %l %s %r %d %a %u %c %t %n

Example: To display user session status:

```
admin> userstat
SessionID  Line/Chan  Slot:Item  Tx/Rx Rate  Svc Address      Username
228687860  1.01.02/01 1:03:01/01 56K/56K     TCP 10.100.0.1   barney
228687861  1.02.03/02 1:04:02/00 28800/33600 TCP 10.168.6.24  jake
<end user list> 2 active user(s)
```

The output contains the following fields:

Field	Description
SessionID	Unique ID assigned to the session.
Line/Chan	Physical address (shelf.slot.line/channel) of the network port on which the connection was established.
Slot:Item	Shelf:slot:item/logical-item of the host port to which the call was routed.
Tx/Rx Rate	Transmit and receive rates.
Svc	Type of service in use for the session. Following are the possible values: --- (The service is being negotiated.) SLP (Serial Line IP) TLN (Telnet) BTN (Binary Telnet) TCP (raw TCP) TRM (Terminal Server) VCN (Virtual Connect) DTP (DTPT)

Field	Description
Dialed#	The number dialed to initiate this session. Displays only with −l option.
ConnTime	The amount of time (in hours:minutes:seconds format) since the session was established. Displays only with −l option.
IdleTime	The amount of time (in hours:minutes:seconds format) since data was last transmitted across the connection. Displays only with −l option.

If you use the −o option and indicate the codes for session ID and line or channel information, the command shows only the following details:

```
admin> userstat -o %i %l
SessionID Line/Chan
228687860  1.01.02/01
228687861  1.02.03/02
<end user list> 1 active user(s)
```

To terminate a user session, include the −k option and session ID with the Userstat command. For example:

```
admin> userstat
SessionID  Line/Chan  Slot:Item   Rate  Svc Address        Username
246986325 1.01.02/01 1:13:01/000 33600 TCP 100.100.8.2    100.100.8.2
<end user list>  1 active user(s)
```

```
admin> userstat -k 246986325
Session 246986325 cleared
```

Version

Description: Displays the current system software version.

Permission level: System

Usage: version

Example: To display the current system software version:

```
admin> version
Software version 1.2
```

View

Description: Changes the information displayed in the top or bottom status window.

Permission level: System

Usage: view *position status-type*

Syntax element	Description
position	The window position may be top, bottom, or left, indicating which area of the status window will be affected by the command.

Syntax element	Description
status-type	If the specified window position is top or bottom, the window can display one of the following types of status information: • general—general status information • log—the 32-message log buffer • line—line and channel status If the specified window position is left, the window can display one of the following types of status information: • connection—WAN connection status • session—management status

Example: To display session information:

```
admin> view left session
```

```
 4 Sessions
   0 - serial - admin
   1 - telnet - tommy
   2 - telnet - super
   3 - telnet - pubs
```

```
1/13/8  RA ........ ........ ........
```

```
M: 48 L: info Src: shelf-1/controller
```

```
                  Issued: 16:48:02, 09/27/1998
```

[Next/Last Conn:<dn/up arw>, Next?Last Page: <pg dn/up>, Exit: <esc>]

See Also: Connection, Ledoff, Log

Wandisplay

Description: Specifies the number of bytes of a WAN message display. When zero is specified the display is turned off.

Permission level: Diagnostic

Usage: wandisplay *n*

The variable is the number of bytes to display.

Example:

```
techpubs> wandisplay 25
```

```
Display the first 25 bytes of WAN messages
```

See Also: Wandisplay, WanOpening

WanDSess

Description: This variation of WanDisplay command enables the administrator to specify a single WAN session to display hex input and output for. As in the WanDisplay command, the local or RADIUS connection profile name is used to specify the session.

Permission level: Diagnostic

Usage: `wandsess sess n`

Option	Description
`sess`	The local or RADIUS connection profile name is used to specify the session.
`n`	Number of bytes to display.

Example:

```
hdlc-1/16> wandsess tim 120
hdlc-1/16> wandsess bob 160
hdlc-1/16> wandsess
 120    tim
 160    bob
```

See Also: Wandisplay, WanNext, WanOpening

WanNext

Description: Specifies the number of bytes of a WAN message to display for the next call only. When zero is specified the display is turned off.

Permission level: Diagnostic

Usage: `wannext n`

The variable n is the number of bytes to display.

Example:

```
techpubs> wannext 25
Display the first 25 bytes of WAN messages for the NEXT call
```

See Also: Wandisplay, WanDSess, WanOpening

WanOpening

Description: Specifies the number of bytes of a WAN opening message to display. Zero disables the display.

Permission level: Diagnostic

Usage: `wanOpening n`

The variable is the number of bytes to display.

Example:

techpubs> **wanopening 50**

Display the first 50 bytes of WAN messages during OPENING only

See Also: Wandisplay, WanDSess

Which

Description: Enables you to look up the nailed group associated with the port used for an Asynchronous Transfer Mode (ATM) connection.

Permission level: System

Usage: which [-p *group* |-n *port*]

Syntax element	Description
-p *group*	Specifies the port (and channel, for the IDSL line interface module) associated with the dedicated (nailed) group indicated by **group**.
-n *port*	Specifies the dedicated (nailed-up) group or groups associated with the port indicated by **port**.

Example: admin> **which -n {1 4 5}**
Nailed group corresponding to port { shelf-1 slot-4 5 } is 155

admin> **which -n {1 17 2}**
Nailed group corresponding to port { shelf-1 trunk-module-1 1 } is 802

Or, in the case of the nailed group corresponding to the port of an IDSL card:

admin> **which -n {1 13 1}**
Nailed group corresponding to port { shelf-1 slot-13 idsl-1 channel 1 }
is 601
Nailed group corresponding to port { shelf-1 slot-13 idsl-1 channel 2 }
is 601
Nailed group corresponding to port { shelf-1 slot-13 atm-internal-1} is
633

Note: For the IDSL LIM, the dedicated (nailed) groups assigned to both BRI channels and the dedicated (nailed) group assigned to the ATM interface are displayed. The ATM Internal interface has the same physical address as the 1st BRI channel. The IDSL line is identified by idsl- before the line number. The ATM internal interface is identified by atm-internal- before the line number.

You can use the which command to determine which port is in use when you have the dedicated (nailed) -group assignment of a Connection profile. For example, if the circuit uses nailed-group 296:

admin> **which -p 296**
The port corresponding to nailed group 296 is: { shelf-1 slot-6 46 }

Or, in the case of the port of an IDSL LIM, if the circuit uses nailed-group 601, and nailed-group 633 its ATM internal interface:

```
admin> which -p 601
The port corresponding to nailed group 601 is:
{ shelf-1  slot-13 idsl-1 chan-1 }
{ shelf-1  slot-13 idsl-1 chan-22 }

admin> which -p 633
The port corresponding to nailed group 633 is: { shelf-1 slot-13
atm-internal-1}
```

If the argument specifies a slot that is not populated, or a dedicated (nailed)-group that is not assigned, the command returns a message that the number was not found. For example:

```
admin> which -p 43
The port corresponding to nailed group 43 is:
NONE!
```

If more than one port has the same dedicated (nailed) group associated with it (which is illegal), the which command returns all the ports that have this dedicated (nailed) group. Using the which command can be a convenient way to find duplicate dedicated (nailed) groups. For example:

```
admin> read sdsl {1 6 46}
SDSL/{ shelf-1 slot-6 46 } read

admin> set line-config nailed-group=801

admin> write
SDSL/{ shelf-1 slot-6 46 } written

admin> which -p 801
The port corresponding to nailed group 801 is:
{ shelf-1 slot-6 46 }
{ shelf-1 trunk-module-1 1 }
```

Duplicate dedicated (nailed)-group assignments can occur only when the administrator changes default nailed-group numbers. To fix the problem, change the dedicated (nailed)-group assignments in one or more profiles, and then verify by using the which command again.

Whoami

Description: Displays the name of the User profile associated with the current session.

Permission level: User

Usage: whoami

Example: To display the name of your User profile:

```
admin> whoami
tommy
```

See Also: Auth

Write

Description: Validates the settings of the working profile and then writes it from the edit buffer to NVRAM.

Note: If the working profile has an index field (a parameter followed by an asterisk), that parameter must have a value or the write is not allowed. If you modify a profile and do not use the Write command before reading another profile, the changes are lost.

Permission level: Update

Usage: `write [-f]`

The -f option forces the write without prompting for confirmation, overwriting an existing profile if one exists with the same index.

Example:

If you issue a Write command when the current profile has not been modified from the saved version, the write does not occur and the following message is displayed:

```
admin> write
Nothing new to write; nothing written.
```

You can force the write to occur by using the –f flag on the Write command line. Note that the write always occurs if the profile has not been written previously.

Example: To create a new Connection profile, modify it, and write it to NVRAM:

```
admin> new conn newyork
CONNECTION/newyork read

admin> list
[in CONNECTION/newyork (new)]
station*=newyork
active=no
encapsulation-protocol=atm
called-number-type=national
dial-number=""
clid=""
ip-options={ yes yes 0.0.0.0/0 0.0.0.0/0 7 100 255 no no 0 +
session-options={ "" "" no 120 no-idle 120 "" }
telco-options={ ans-and-orig no off 1 no no 56k-restricted 0 +
usrRad-options={ global 0.0.0.0 1646 "" 1 acct-base-10 }
calledNumber=""

admin> write
CONNECTION/newyork written
```

See Also: List, New, Read, Set

Stinger unit Profile and Parameter Reference

<div style="text-align: right; font-size: 2em;">**2**</div>

Numeric

40-DMT-ADSL

Description: *Not currently used.* Specifies whether code images for 40 port Annex A/C DMT-ATM modules should be stored in Flash memory.

Usage: Valid values are as follows:

- `auto`—Loads code image if there is a module installed of that type. This is the default.
- `load`—Loads code image when present in tar file
- `skip`—Skips code image when present in tar file

Example: `set 40-dmt-adsl = auto`

Location: Load-Select

See Also: 48-DMT-ADSL

48-DMT-ADSL

Description: *Not currently used.* Controls whether code images for 48 port Annex A/B/C DMT-ATM modules should be stored in flash memory.

Usage: Valid values are as follows:

- `auto`—Loadss code image if there is a module installed of that type. Otherwise, skip it. This is the default.
- `load`—Loads code image when present in tar file
- `skip`—Skips code image when present in tar file

Example: `set 48-dmt-adsl = auto`

Location: Load-Select

See Also: 40-DMT-ADSL

7-Even

Description: Specifies whether the Stinger unit applies 7-bit even parity to data it sends toward a dial-in terminal-server user.

Usage: Accept the default value for most applications. Valid values are as follows:

- `Yes`—Enables the use of 7-bit even parity for data sent to dial-in terminal-server users.
- `No`—Specifies 8-bit communication, in which no parity bit applies. This is the default.

Example: `set 7-even = yes`

Dependencies: If terminal services are disabled, 7-Even does not apply.

Location: Terminal-Server > Modem-Configuration

See Also: Modem-Configuration

A

AAL-Type

Description: Specifies the type of ATM adaptation layer (AAL) in use for the contract.

Usage: Stinger unit units support AAL-5 and AAL-0 types. AAL-0 is used for all traffic that is not AAL-5. AAL-5 circuits always handle packet traffic, which requires that the system monitor the cell stream for the end-of-packet flag, thereby ensuring that packets rather than individual cells are discarded or tagged when necessary. The default value is `AAL-0`.

Example: `set aal-type = aal-5`

Dependencies: If the Encapsulation-Protocol parameter is not set to `ATM` or `ATM-Circuit`, AAL-Type does not apply.

Location: ATM-QoS

See Also: ATM-QoS (profile), Contract-Name, Early-Packet-Discard, Partial-Packet-Discard, QoS-Class

Access-Mode

Description: Specifies the type of connection used in the configuration of the copper loop for a copper loop test (CLT).

Usage: Valid values are as follows:
- `bridged` —Copper loop is connected to the test head and the corresponding port of the spare LIM.
- `looking-out`—Copper loop is connected only to test head. This is the default.

Example: `set access-mode = looking-out`

Location: Clt-Access

See Also: Access-Terminal

Access-Port

Description: Specifies the port number of the copper loop to be tested.

Usage: Enter the port number of the copper loop to be tested. The default is 1.

Example: `set access-port = 2`

Location: Clt-Access

See Also: Activate-Access

Access-Result

Description: Indicates current state of the copper loop test (CLT).

Usage: Valid values are:

- `idle` —Test head is inactive and no copper loops are connected. This is the default

- `access-activated`—Test head is active and copper loop is connected as specified.

Example: `access-result = idle`

Location: Clt-Access

See Also: Activate-Access

Access-Slot

Description: Specifies the slot number of line interface module (LIM) containing copper loop to be tested.

Usage: Enter the slot number, preceded by `slot-`, of the line interface module. The default is slot-16.

Example: set access-slot = slot-2

Location: Clt-Access

See Also: Code-Violations

Access-Terminal

Description: Specifies the connection point of the copper loop used in the configuration of the copper loop for a copper loop test (CLT).

Usage: Valid values are as follows:

- `Internal-tester-terminal`—Copper loop is connected to the internal test head of the CLT. This is the default.

- `External-tester-terminal`—Copper loop is connected to the external test terminals of the CLT or path selector module (PSM).

- `Auxiliary-tester-terminal`—Copper loop is connected to the auxiliary test terminals of the CLT module or PSM.

- `External-loop`—Internal test head of the CLT module is connected to external terminals.

Example: set access-terminal = internal-tester-terminal

Location: Clt-Access

See Also: Activate-Access

Acct-Checkpoint

Description: Specifies the interval (in seconds) at which to send checkpoint packets to the RADIUS daemon.

Usage: Specify an integer from 0 to 60. The default is 0 (zero).

Example: `set acct-checkpoint = 30`

Location: External-Auth > Rad-Acct-Client

See Also: Rad-Acct-Client

Acct-Drop-Stop-On-Auth-Fail

Description: Specifies whether RADIUS accounting stop packets are dropped for connections that fail authentication.

Usage: Valid values are as follows:

- `Yes`—Specifies that RADIUS Accounting Stop packets are dropped for connections that fail authentication.
- `No`—Specifies that RADIUS Accounting Stop packets are sent for connections that fail authentication. This is the default.

Example: `set acct-drop-stop-on-auth-fail = yes`

Location: External-Auth > Rad-Acct-Client

See Also: Acct-ID-Base, Acct-Key, Acct-Limit-Retry, Acct-Port, Acct-Server-N, Acct-Sess-Interval, Acct-Src-Port, Acct-Timeout

Acct-Host

Description: Specifies a RADIUS accounting server for the Stinger unit to use for the connection.

Usage: Enter the IP address of a RADIUS accounting server. The default is 0.0.0.0, which causes the Stinger unit to look for an accounting server at the address specified by the External-Auth profile.

Example: `set acct-host = 10.9.8.2/24`

Location: Connection *station* > UsrRad-Options

See Also: Acct-ID-Base, Acct-Key, Acct-Limit-Retry, Acct-Port, Acct-Server-N, Acct-Sess-Interval, Acct-Src-Port, Acct-Timeout

Acct-ID-Base

Description: Specifies whether the numeric base of the RADIUS Acct-Session-ID attribute is 10 or 16. You can set Acct-ID-Base globally and for each connection.

Usage: Valid values are as follows:

- `Acct-Base-10`—Specifies a decimal base.This is the default.

- `Acct-Base-16`—Specifies a hexadecimal base.

The value you specify controls how the Stinger unit presents the Acct-Session-ID attribute to the accounting server.

Note: The Acct-Session-ID attribute is defined in section 5.5 of the RADIUS accounting specification.

Example: `set acct-id-base = acct-base-10`

Dependencies: Consider the following:

- If Acct-Type does not specify RADIUS, Acct-ID-Base parameter value does not apply.

- Changing the value of Acct-ID-Base while accounting sessions are active results in inconsistent reporting between the Start and Stop records.

Location: Connection *station* > UsrRad-Options, External-Auth > Rad-Acct-Client

See Also: Acct-Key, Acct-Limit-Retry, Acct-Port, Acct-Server-N, Acct-Sess-Interval, Acct-Src-Port, Acct-Timeout

Acct-Key

Description: Specifies a RADIUS shared secret. A shared secret acts as a password between the Stinger unit and the accounting server.

Usage: Specify the text of the shared secret. The value you specify must match the value in the RADIUS `clients` file. If you specify a null value, the system logs the following warning:

```
warning: acct-key is empty (bad for security)
```

Example: `set acct-key = mypw`

Dependencies: If the Acct-Type parameter value does not specify RADIUS, Acct-Key does not apply.

Location: Connection *station* > UsrRad-Options, External-Auth > Rad-Acct-Client

See Also: Acct-ID-Base, Acct-Limit-Retry, Acct-Port, Acct-Server-N, Acct-Sess-Interval, Acct-Src-Port, Acct-Timeout

Acct-Limit-Retry

Description: Specifies the maximum number of times the Stinger tries to send accounting packets.

When the Stinger unit is configured for RADIUS accounting, it sends accounting Start and Stop packets to the RADIUS server to record connections. If the server does not acknowledge a packet within the number of seconds you specify for Acct-Timeout, the Stinger unit tries again, resending the packet until the server responds, or dropping the packet if the queue of packets to be re-sent is full. You can limit the number of retries by setting a maximum.

Usage: To set the maximum number of retries for accounting packets, set Acct-Limit-Retry to a value greater than 0 (zero). A value of 0 (the default) indicates an unlimited number of retries.

Note: The Stinger unit always makes at least one attempt. For example, if you set the number of retries to 10, the Stinger unit makes 11 attempts—the original attempt plus 10 retries.

Example: `set acct-limit-retry = 10`

Location: External-Auth > Rad-Acct-Client

See Also: Acct-ID-Base, Acct-Key, Acct-Port, Acct-Server-N, Acct-Sess-Interval, Acct-Src-Port, Acct-Timeout

Acct-Port

Description: Specifies the UDP destination port to use for external accounting requests. When using RADIUS accounting, you can set Acct-Port globally and for each connection.

Usage: Specify a UDP port number from 1 to 32767. The value must match the port number the accounting daemon uses. For RADIUS, the default in a Connection profile is 1646, and the default in the External-Auth profile is 0 (zero).

Example: `set acct-port = 1500`

Dependencies: If the Acct-Type parameter value does not specify RADIUS, Acct-Port does not apply.

Location: Connection *station* > UsrRad-Options, External-Auth > Rad-Acct-Client

See Also: Acct-ID-Base, Acct-Key, Acct-Limit-Retry, Acct-Port, Acct-Server-N, Acct-Sess-Interval, Acct-Src-Port, Acct-Timeout

Acct-RADIUS-Compat

Description: Enables or disables vendor-specific attribute (VSA) compatibility mode when the Stinger unit is using RADIUS for accounting purposes.

Usage: Valid values are as follows:

- `old-ascend`—Specifies that the Stinger unit does not send the vendor-specific attribute to the RADIUS server and does not recognize the vendor-specific attribute if the server sends it. This is the default.
- `vendor-specific`—Specifies that the Stinger unit uses the vendor-specific attribute to encapsulate Lucent vendor attributes, and uses the RFC-defined User-Password encryption algorithm as well.

Example: `set acct-radius-compat = vendor-specific`

Location: External-Auth > Rad-Acct-Client

See Also: Auth-RADIUS-Compat, Call-Log-RADIUS-Compat

Acct-Reset-Time

Description: Specifies the number of seconds that must elapse before the Stinger unit returns to using the primary RADIUS accounting server.

Usage: Specify the number of seconds. The default is 0 (zero), which specifies that the Stinger unit does not return to using the primary RADIUS accounting server.

Example: `set acct-reset-time = 60`

Dependencies: For Acct-Reset-Time to apply, you must specify at least one value for the Acct-Server-*N* parameter.

Location: External-Auth > Rad-Acct-Client

See Also: Acct-ID-Base, Acct-Key, Acct-Limit-Retry, Acct-Port, Acct-Server-N, Acct-Sess-Interval, Acct-Src-Port, Acct-Timeout

Acct-Server-*N*

Description: Specifies the IP addresses of up to three external accounting servers. The Stinger unit first tries to connect to server #1. If it receives no response, it tries to connect to server #2. If it still receives no response, it tries to connect to server #3.

Usage: Specify an IP address in dotted decimal notation. The default is 0.0.0.0, which indicates that no accounting server exists.

Example: `set acct-server-1 = 10.2.3.4/24`

Dependencies: Consider the following:

- If the Acct-Type parameter value does not specify RADIUS, Acct-Server-*N* does not apply.
- If the Stinger unit connects to a server other than server 1, and `Acct-Reset-Time=0`, the Stinger unit continues to use that server until it fails to service requests, even if the server 1 comes back online. If the Acct-Reset-Time parameter is set to a value other than 0 (zero), the Stinger unit returns to using the primary accounting server after the number of seconds specified by Acct-Reset-Time has elapsed.

Location: External-Auth > Rad-Acct-Client

See Also: Acct-ID-Base, Acct-Key, Acct-Limit-Retry, Acct-Port, Acct-Sess-Interval, Acct-Src-Port, Acct-Timeout

Acct-Sess-Interval

Description: Specifies the number of seconds between RADIUS accounting reports that record the number of open sessions.

Usage: Specify a number of seconds from 0 to 65535. The default is 0 (zero), which turns off regular RADIUS open-session reports.

Example: `set acct-sess-interval = 15`

Dependencies: If the Acct-Type parameter value does not specify RADIUS, Acct-Sess-Interval does not apply. Acct-Sess-Interval has no effect unless the Lucent RADIUS daemon is running.

Location: External-Auth > Rad-Acct-Client

See Also: Acct-ID-Base, Acct-Key, Acct-Limit-Retry, Acct-Port, Acct-Server-N, Acct-Src-Port, Acct-Timeout

Acct-Src-Port

Description: Specifies the UDP source port to use for RADIUS accounting.

Usage: Specify a value from 0 to 65535. The default is 0 (zero), which specifies that the Stinger unit selects the source port from the nonprivileged port range (1024–2000).

Example: `set acct-src-port = 3278`

Dependencies: The Stinger unit uses the source port number to demultiplex the RADIUS reply packets to the appropriate line or trunk module. The system uses a separate source port for each module and shelf controller. On the Stinger unit, the actual source port is the value of Acct-Src-Port plus the slot number. The slot number is 0 (zero) for the shelf controller. So, if you set Acct-Src-Port to 1000, packets originating from the shelf controller have a source port value of 1000, while packets originating from slot 6 have a source port value of 1006.

Location: External-Auth > Rad-Acct-Client

See Also: Acct-Drop-Stop-On-Auth-Fail, Acct-ID-Base, Acct-Key, Acct-Limit-Retry, Acct-Port, Acct-Reset-Time, Acct-Server-N, Acct-Sess-Interval, Acct-Stop-Only, Acct-Timeout, Acct-Type, Rad-Acct-Client

Acct-Stop-Only

Description: Specifies whether the Stinger unit should send an accounting stop packet that does not contain a user name. (At times, the Stinger unit can send an accounting stop packet to the RADIUS server without having sent an Accounting Start packet. These stop packets have no user name.)

Usage: Valid values are as follows:

- `Yes`—Specifies that the Stinger unit should send an accounting stop packet even if it does not contain a user name. This is the default.
- `No`—Specifies that the Stinger unit should not send an accounting stop packet if it does not contain a user name.

Example: `set acct-stop-only = no`

Location: External-Auth > Rad-Acct-Client

See Also: Acct-Drop-Stop-On-Auth-Fail, Acct-ID-Base, Acct-Key, Acct-Limit-Retry, Acct-Port, Acct-Reset-Time, Acct-Server-N, Acct-Sess-Interval, Acct-Timeout, Acct-Type, Rad-Acct-Client

Acct-Timeout

Description: Specifies the amount of time (in seconds) that the Stinger unit waits for a response to a RADIUS accounting request. You can set Acct-Timeout globally and for each connection.

If it does not receive a response within the specified time, the Stinger unit sends the accounting request to the next server specified by Acct-Server-*N*. If all RADIUS accounting servers are busy, the Stinger unit stores the accounting request and tries again at a later time. It can queue up to 154 requests.

Usage: Specify an integer from 1 to 10. The default for a Connection profile is 1. The default for the External-Auth profile is 0 (zero).

Example: `set acct-timeout = 5`

Dependencies: If the Acct-Type parameter does not specify RADIUS, Acct-Timeout does not apply.

Location: Connection *station* > UsrRad-Options, External-Auth > Rad-Acct-Client

See Also: Acct-Drop-Stop-On-Auth-Fail, Acct-ID-Base, Acct-Key, Acct-Limit-Retry, Acct-Port, Acct-Reset-Time, Acct-Server-N, Acct-Sess-Interval, Acct-Stop-Only, Rad-Acct-Client

Acct-Type

Description: Specifies whether to use RADIUS accounting or no accounting at all. You can specify accounting globally and for each connection.

Usage: To enable or disable accounting in the External-Auth profile, specify one of the following values:

- `None`—Disables accounting. This is the default.
- `radius`—Enables RADIUS accounting.

To set accounting policy for a particular connection, specify one of the following values in the Connection profile:

- `global`—Specifies that the Stinger unit sends accounting information to one of the accounting servers specified by the External-Auth profile. This is the default.
- `local`—Specifies that the Stinger unit sends accounting information to the accounting server specified by Acct-Host in the Connection profile.
- `both`—Specifies that the Stinger unit sends accounting information to both the global and local servers.

Example: `set acct-type = radius`

Dependencies: Consider the following:

- If you set `Auth-Type=radius/logout`, the Stinger unit disables RADIUS accounting. For Acct-Type to have any effect in a Connection profile, you must set Auth-Type to RADIUS.

- If you set Acct-Type to RADIUS, you must set the Acct-Server parameter to specify at least one accounting server, and that server must be running a version of the daemon that specifically supports accounting.

Location: Connection *station* > UsrRad-Options, External-Auth

See Also: Acct-Drop-Stop-On-Auth-Fail, Acct-ID-Base, Acct-Key, Acct-Limit-Retry, Acct-Port, Acct-Reset-Time, Acct-Server-N, Acct-Sess-Interval, Acct-Stop-Only, Acct-Timeout, Acct-Type, Rad-Acct-Client

Accum-Bit-Err

Description: The read-only number of actual bit errors detected during the continuous Bit Error-Rate Test (BERT).

Usage: The Accum-Bit-Err value is read-only.

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Status

See Also: BERT-Enable, BERT-Error-Counter, BERT-Operation-State, BERT-Timer

ACF-Comp-Enabled

Description: *Not currently used.* Specifies whether the PPP address and control field compression are enabled or disabled.

Location: Connection > PPP-Options

Action

Description: A subprofile that specifies the action performed by the Stinger unit when it detects the event specified by the Event parameter setting.

Usage: With an Alarm profile as the working profile, list the Action subprofile. For example:

```
admin> list action
[in ALARM/robin:action]
alarm-led-minor=off
alarm-led-major=off
alarm-relay-minor=off
alarm-relay-minor-duration=0
alarm-relay-major=off
alarm-relay-major-duration=0
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: Alarm *name*

See Also: Alarm-LED-Major, Alarm-LED-Minor, Alarm-Relay-Major, Alarm-Relay-Minor-Duration

Activate-Access

Description: Read-only. Indicates whether copper loop is connected for copper loop test (CLT).

Usage: Valid values for this read-only parameter are

- `yes` —Copper loop is connected as specified.
- `no`—Copper loop is disconnected from test head or test terminals. This is the default.

Example: `activate-access = no`

Location: Clt-Access

See Also: Access-Result

Activation

Description: *Not currently used.*

Usage: Leave the default value: `static`.

Example: `activation = static`

Location: HDSL2 > Line-Config, ATM-DS3 > Line-Config

Active

Description: Specifies the activation of an interface or feature. An active interface is available for use.

Usage: Valid values are as follows:

- `Yes`—Activates the interface or feature. In the BOOTP-Relay subprofile, setting Active=Yes enables the Stinger unit to forward BOOTP requests and `responses` between specified BOOTP servers and booting hosts on any of the Stinger unit unit's IP interfaces.
- `No`—Makes the interface or feature unavailable for use. This is the default.

Example: set active = yes

Location: Connection *station* > IP-Options > TOS-Options, IP-Global > BOOTP-Relay

See Also: BOOTP-Relay, BOOTP-Servers N, Enable

Active-Enabled

Description: Specifies whether a profile is enabled or disabled. Profiles this applies to:

- User profile. A disabled profile is not available for use. Specifies whether the profile is enabled or disabled. A dash appears before each inactive profile.
- In an SNMPv3-Notifications or SNMPv3-Target-Param profile, specifies whether the profile is used to generate notifications.
- In a Trap profile, specifies whether traps are sent to the host specified by the profile.

Usage: Valid values are as follows:

In a User profile

- `yes`—Enables the User profile.
- `no`—Disables the User profile. This is the default.

In an SNMPv3-Notifications or SNMPv3-Target-Param profile

- `yes`—Specifies that the profile is used to generate notifications.
- `no`—Specifies that the profile is not used to generate notifications.This is the default.

In a Trap profile

- `Yes`—Specifies traps are sent.
- `No`—Specifies that traps are not sent. This is the default.

Example: `set active-enabled = yes`

Location: User *name,* SNMPv3-Notifications, SNMPv3-Target-Param, Trap

See Also: User (profile), Host-Port, Msg-Proc-Model, Notify-Tag-List, Security-Level, Security-Model, Security-Name, Tag, Target-Params-Name

Active-Route

Description: Specifies whether the Stinger unit adds a static route to the routing table.

Usage: Specify Yes or No. The default is Yes, except for the IP-Route profile called `default`. For the `default` IP-Route profile, the default is No.

- `Yes`—Activates the static route and causes the Stinger unit to add it to the routing table.
- `No`—Disables the route. An inactive route does not affect packet routing.

Example: `set active-route = yes`

Dependencies: The default route for an IP-Route profile always has the name `default` and a destination address of 0.0.0.0/0. To activate the default route, you must set the Gateway-Address parameter in the IP-Route *name* profile to the IP address of the default router, and set `active-route=yes`.

Location: IP-Route *name*

See Also: Gain-Default, Metric, Preference, Private-Route

Active-Upstream-Bandwidth-On-Trunks

Description: Indicates active trunk-side bandwidth, based on the number of trunk ports and their status.

Usage: The Active-Upstream-Bandwidth-On-Trunks value is read-only.

Example: `active-upstream-bandwidth-on-trunks = 155540`

Location: Bandwidth-Stats

See Also: Max-Switched-VCC-VPI, Standby-Upstream-Bandwidth-On-Trunks

Add-Link-Cond-Time

Description: *Not currently used.* Specifies the link conditioning timeout in seconds during link addition or insertion.

Usage: Leave the default value.

Example: `add-link-cond-time = 0`

Location: DS1-ATM/{ shelf-*N* slot-*N N*} > Line-config > IMA-option-config

See Also: Fault-Clearing-Time, Fault-Clearing-Type, Ne-Tx-Lid

Add-Persistence

Description: Specifies the number of seconds that average line utilization (ALU) must persist beyond the target-utilization threshold before the Stinger unit adds bandwidth from available channels. When adding bandwidth, the unit adds the number of channels specified by Increment-Channel-Count parameter in the MPP-Options subprofile.

Usage: Specify an integer from 1 to 300. The default is 5.

Example: `set add-persistence = 15`

Dependencies: When the Seconds-History parameter value is high, Add-Persistence has little effect.

Location: Answer-Defaults > MPP-Answer, Connection *station* > MPP-Options

See Also: Bandwidth-Monitor-Direction, Base-Channel-Count, Decrement-Channel-Count, Dynamic-Algorithm, Increment-Channel-Count, Maximum-Channels, Minimum-Channels, Seconds-History, Summarize-RIP-Routes, Target-Utilization

Address

Description: Specifies an address or a prefix to an address in one of several profiles. Depending on which profile the parameter is in, the Address setting can be configurable or read-only.

Usage: Address parameters have different uses in different profiles. The specific use of the address determines the number of bytes the address needs.

- In the ATM-Addr-Alias profile, the address parameter specifies the Private Network-to-Network Interface (PNNI) node, the ATM end-system address, or a part of the end-system address. The number of bytes is specified in the Length parameter setting in the same profile.

- In the PNNI-Node-Prefix profile, the read-only Address parameter specifies the system-generated prefix for the default node's ATM address. When the system initially generates a default prefix value, it stores it in the PNNI-Node-Prefix setting of the ATM-Prefix profile. The system uses the stored value to generate an internal prefix table, which it uses to build default addresses.

Note: For information about manual configuration of the Address parameter value in the PNNI-Node_Prefix profile see the *Stinger Private Network-to-Network Interface (PNNI) Supplement*.

- In the Addr-Index subprofile of the PNNI-Route-Addr profile, the Address parameter specifies the prefix of a reachable ATM address.

- In the PNNI-Summary_Addr profile, the Address parameter specifies the prefix of a reachable ATM address.

- In the SPVC-Addr-Prefix profile, the Address parameter specifies the prefix value used to generate addresses in default ATM-SPVC-Addr-Config profiles. When the Address value is set to 0 (zero), the default, the prefix value is taken from the Address parameter setting in the PNNI-Node-Prefix profile.

  Because multiple target switched permanent virtual channel (SPVC) addresses may be required for some configurations, you can also create an entire new, additional set of ATM-SPVC-Addr-Config profiles that specify different SPVC addresses. For an example of how to do this, see the *Stinger Private Network-to-Network Interface (PNNI) Supplement*.

  For information about manually configuring the value, see *ATM Forum Addressing: User Guide version 1*.0, AF-RA-0105.000, January, 1999 and *ATM Forum Addressing: Reference Guid*e, AF-RA-0106.000, February, 1999.

- In the SVC-Addr-Prefix profile, the Address parameter specifies the prefix value used to generate addresses in default ATM-SVC-Address-Config profiles. When the Address value is set to 0 (zero), the default, the prefix value is taken from the Address parameter setting in the PNNI-Node-Prefix profile.

Example: An example of a PNNI-Node-Prefix Address is:

address = 39:84:0f:80:01:bc:72:00:01:bc:e7:6c:02

An example of a SPVC-Addr-Prefix Address is:

address = 00:00:00:00:00:00:00:00:00:00:00:00:00

Dependencies: In the ATM-Prefix profile, when the switched permanent virtual channel (SPVC) and switched virtual channel (SVC) prefix addresses are zero, the SPVC prefix and SVC prefix take their value from the Private Network-to-Network Interface (PNNI) node prefix. Whenever you explicitly configure an address or a prefix setting, the system uses the value you specify rather than the system-generated default. If you delete the ATM-Prefix profile, the system creates a new one at the next system startup and derives the default prefix from the primary controller serial number.

Location: Atm-Addr-Alias, Atm-Prefix *name* > pnni-node-prefix, Atm-Prefix *name* > Spvc-addr-prefix, Atm-Prefix *name* > Svc-addr-prefix

See Also: Length

Addr-Index

Description: A subprofile occurring in the PNNI-Route-Addr and PNNI-Summary-Addr profiles. It includes a complex index value identifying the reachable address in the PNNI-route-addr profile. See the *Stinger Private Network-to-Network Interface (PNNI) Supplement*.

Usage: Use the New, Read, and List commands to list this subprofile

```
admin> list addr-index
[in PNNI-ROUTE-ADDR/"":addr-index (new)]
node-index = 0
address =
00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00
prefix-len = 0
index = 0
```

Note: The first example is for the PNNI-Route-Addr profile. The second example is for the PNNI-Summary-Addr profile.

Example: set addr-index = { 1 00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:0+

Example: set addr-index = { 1 internal-summary 00:00:00:00:00:00:00:00:00:00:00:00+

Location: PNNI-Route-Addr, PNNI-Summary-Addr

See Also: Adv-Node-Id, Adv-Port-Id, If-Index, Info, Metrics-Tag, Oper-Status, Originate-Advert, PNNI-Scope, Proto, PTSE-Id-PTSE-Id, State, VP-CapabilityAdmin-State-Perm-If (profile)

Description: A profile that holds information about the Stinger unit dedicated (nailed-up) interfaces. The system creates a profile for an active dedicated interface and assigns it an interface index. The Admin-State-Perm-If profile contains only read-only settings.

Usage: To make Admin-State-Perm-If the working profile and list its contents, use the Read and List commands. For example:

```
admin> read admin-state-perm-if frdevice1
ADMIN-STATE-PERM-IF/frdevice1 read
```

```
admin> list
[in ADMIN-STATE-PERM-IF/frdevice1]
station*=frdevice1
snmp-interface=19
desired-state=admin-state-up
desired-trap-state=trap-state-enabled
inet-profile-type=1
```

Admin-State-Phys-If (profile)

Description: Indicates information about the system's physical interfaces. The system creates a profile for each of its physical interfaces. The profile is read-only.

Usage: To make Admin-State-Phys-If the working profile and list its contents, use the Dir, Read, and List commands. For example, to make the Admin-State-Phys-If profile for the device on shelf 1, slot 13 the working profile:

```
techpubs> dir ADMIN-STATE-PHYS-IF
24  10/31/2000 18:08:05  { shelf-1 slot-1 1 }
techpubs> read ADMIN-STATE-PHYS-IF  { shelf-1 slot-1 1 }
ADMIN-STATE-PHYS-IF/{ shelf-1 slot-1 1 } read
techpubs> list
[in ADMIN-STATE-PHYS-IF/{ shelf-1 slot-1 1 }]
device-address* = { shelf-1 slot-1 1 }
slot-type = dadsl-atm-24-card
snmp-interface = 13
modem-table-index = 0
desired-state = admin-state-down
desired-trap-state = trap-state-enabled
```

See Also: Desired-State, Desired-Trap-State, Device-Address, Slot-Type, SNTP-Info

Advanced-Agent-Enabled

Description: Indicates whether the Advanced MIB is in use. The Advanced MIB is the name of the SNMP MIB previously called the WAN MIB.

Usage: The Advanced-Agent-Enabled setting is read-only. Yes indicates that the Advanced MIB is in use. No indicates that the Advanced MIB is not in use.

Example: `advanced-agent-enabled = yes`

Location: Base

See Also: AIM-Enabled, Countries-Enabled, Data-Call-Enabled, D-Channel-Enabled, Max-Switched-VCC-VPI, Multi-Rate-Enabled, Network-Management-Enabled, PHS-Support

Adv-Node-Id

Description: Specifies the ID of a Private Network-to-Network Interface (PNNI) node that advertises reachability to the address prefix.

Usage: You can enter the full 22-byte ID or an alias, as described in "Using an alias to assign an address" in the *Stinger Private Network-to-Network Interface (PNNI) Supplement* for details on using an alias to assign an address.

Example: adv-node-id =
00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:0+

Location: PNNI-Route-Addr

See Also: Addr-Index, If-Index, Adv-Port-Id, Type, Proto, PTSE-Id-PTSE-Id, Originate-Advert, Info, Oper-Status

Adv-Port-Id

Description: Specifies the identifier on the advertising node of the interface used to reach the address prefix.

Usage: Specify a number from zero (0) to 2147483647.

Example: set adv-port-id = 0

Location: PNNI-Route-Addr

See Also: Addr-Index, Addr-Index, Adv-Node-Id, Type, Proto, PNNI-Scope, VP-Capability, Metrics-Tag, PTSE-Id-PTSE-Id, Originate-Advert

AIM-Enabled

Description: Indicates whether the unit enables Ascend inverse multiplexing (AIM).

Usage: The AIM-Enabled setting is read-only.

- Yes—Indicates that AIM is enabled. This is the default.

- No—Indicates that AIM is not enabled.

Example: set aim-enabled = yes

Location: Base

See Also: Data-Call-Enabled, Max-Switched-VCC-VPI, Multi-Rate-Enabled

AIS-Receive

Description: Indicates whether the remote end is sending an alarm indication signal (AIS) on the line. The remote end sends an AIS (instead of normal data) to take the line out of service.

Usage: The AIS-Receive setting is read-only. Values are as follows:

- True—Indicates that the remote end is sending an AIS.

- False—Indicates that the remote end is not sending an AIS.

Example: ais-receive = true

Location: DS3-ATM {shelf-*N* slot-*N N*}, OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: Yellow-Receive

Alarm (profile)

Description: Configures the unit's LEDs and alarm relays to respond to specific conditions.

Usage: To make Alarm the working profile and list its contents, use the Read and List commands. For example:

Example:

```
admin> read alarm robin
ALARM/robin read

admin> list
[in ALARM/robin]
name*=robin
enabled=no
event=line-state-change
physical-address={ any-shelf any-slot 0 }
action={ off off off 0 off 0 }
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
ALARM/robin written
```

Note: You can configure default Alarm profiles that apply to the entire Stinger unit. You do this by setting the Physical-Address parameter in an Alarm profile to 0 0 0 (any shelf, any slot, any item).

See Also: Action, Enable, Event

Alarm-Enabled

Description: Specifies whether the Stinger unit traps alarm events and sends a traps-PDU (Protocol Data Unit) to the SNMP manager. The Ascend Enterprise MIB defines the following alarm events..

Alarm event	Indicates that the unit
coldStart (RFC-1215 trap-type 0)	Is reinitializing itself in such a way that it might alter the configuration of either the SNMP manager or the unit.
warmStart (RFC-1215 trap-type 1)	Is reinitializing itself so that neither the configuration of the SNMP manager nor that of the unit will change.
linkDown (RFC-1215 trap-type 2)	Recognizes a failure in one of the communication links represented in the SNMP manager's configuration.
linkUp (RFC-1215 trap-type 3)	Recognizes that one of the communication links represented in the SNMP manager's configuration has come up.
frDLCIStatusChange (RFC-1315 trap-type 1)	Recognizes that one of the virtual circuits has changed states. The link has been created, invalidated, or toggled between the active and inactive states.
eventTableOverwrite (Lucent trap-type 16)	Detected that a new event has overwritten an unread event. Once sent, additional overwrites will not cause another trap to be sent until at least one table's worth of new events has occurred.

Note: See the Ascend Enterprise MIB for the most up-to-date information.

Usage: Valid values are as follows:

- `Yes`—Specifies that the Stinger unit sends alarm-event traps to the host specified in the Host-Address parameter setting in the Trap *name* profile. This is the default.

- `No`—Specifies that the Stinger unit does not send alarm-event traps.

Example: `set alarm-enabled = yes`

Location: Trap *host-name*

See Also: Community-Minus-1, Host-Name, Port-Enabled, Security-Mode

Alarm-Id

Description: A subprofile that identifies an alarm, indicating the shelf and module.

Usage: Us the Dir, Read, and List commands to display this profile as in this example:

```
admin> read alarm-stat { { shelf-1 trunk-module-1 1 }
line-state-change }
ALARM-STAT/{ { shelf-1 trunk-module-1 1 } line-state-change+ read
admin> list
[in ALARM-STAT/{ { shelf-1 trunk-module-1 1 }
line-state-change+]
alarm-id* = { { shelf-1 trunk-module-1 1 } line-state-change }
alarm-state = alarm-active
```

Location: Alarm-Stat

See Also: Alarm command, Alarm-State

Alarm-LED-Major

Description: Specifies the major alarm LED.

Usage: Specify On, Off, or Blink. Off is the default.

Example: `set alarm-led-major = on`

Location: Alarm *name* > Action

See Also: Alarm-LED-Minor

Alarm-LED-Minor

Description: Specifies the minor alarm LED.

Usage: Specify On, Off, or Blink. Off is the default.

Example: `set alarm-led-minor = on`

Location: Alarm *name* > Action

See Also: Alarm-LED-Major

Alarm-Relay-Major

Description: Specifies the major alarm relay.

Usage: Specify On or Off. Off is the default.

Example: set alarm-relay-major = on

Location: Alarm *name* > Action

See Also: Alarm-Relay-Major-Duration

Alarm-Relay-Major-Duration

Description: Specifies the number of seconds that the Stinger unit leaves Alarm-Relay-Major in the position specified in the Alarm-Relay-Major parameter.

Usage: Specify an integer. The default is 0 (zero), which directs the Stinger unit to leave the alarm set indefinitely.

Example: set alarm-relay-major-duration = 30

Location: Alarm *name* > Action

See Also: Alarm-Relay-Major

Alarm-Relay-Minor

Description: Specifies the minor alarm relay.

Usage: Specify On or Off. Off is the default.

Example: set alarm-relay-minor = on

Location: Alarm *name* > Action

See Also: Alarm-Relay-Minor-Duration

Alarm-Relay-Minor-Duration

Description: Specifies the number of seconds that the Stinger unit leaves Alarm-Relay-Minor in the position specified in the Alarm-Relay-Minor parameter.

Usage: Specify a number. The default is 0 (zero), which directs the Stinger unit to leave the alarm set indefinitely.

Example: set alarm-relay-minor-duration = 30

Location: Alarm *name* > Action

See Also: Alarm-Relay-Minor

Alarm-Stat (profile)

Description: A profile that lets the user view the status of alarm. When there are alarms, Alarm-Stat entries are created.

Usage: The user can list the alarms using the following command.

```
admin> dir alarm-stat
0  06/20/1999 17:23:20  { { shelf-1 trunk-module-1 1 }
line-state-change }
0  06/20/1999 17:23:49  { { shelf-1 trunk-module-1 2 }
line-state-change }
```

The profile lists the alarm-Id of each of the alarms that have occurred. Alarm-Id consists of the physical address of the device that has the alarm condition and the alarm event. The user can view the status of an alarm event by entering the read command for the Alarm-Stat profile and then entering a list command. For example, the status of the alarm could be seen by doing the following:

```
admin> read alarm-stat { { shelf-1 trunk-module-1 1 }
line-state-change }
ALARM-STAT/{ { shelf-1 trunk-module-1 1 } line-state-change+ read
admin> list
[in ALARM-STAT/{ { shelf-1 trunk-module-1 1 } line-state-change+]
alarm-id* = { { shelf-1 trunk-module-1 1 } line-state-change }
alarm-state = alarm-active
```

Alarm-State

Description: Indicates the status of the alarm specified by Alarm-Id.

Usage: Valid values are as follows:

*   Alarm-Active—Indicates that the alarm is active and appropriate action has been taken (setting LEDs or closing relays).
*   Alarm-Acknowledged—Indicates that the alarm has been acknowledged by the user.

Example: set alarm-state = alarm-active

Note: The user can acknowledge the alarm by setting the alarm-state field to alarm-acknowledged or using the alarm -a commandAlarm

Location: Alarm-Stat

See Also: Alarm-Stat (profile), Alarm command

AL-DMT (profile)

Description: Configures each of the 12 asymmetric digital subscriber lines ports on each installed ATM ADSL LIM.

Usage: To make AL-DMT the working profile and list its contents, use the Read and List commands. For example, to make the AL-DMT profile for the device on shelf 1, slot 4 the working profile:

```
admin> read al-dmt {1 4 1}
AL-DMT/{ shelf-1 slot-4 1 } read

admin> list
[in AL-DMT/{ shelf-1 slot-4 1 }]
name=1:4:1
physical-address*={ shelf-1 slot-4 1 }
enabled=yes
sparing-mode = inactive
ignore-lineup = system-defined
line-config={ 0 301 static { any-shelf any-slot 0 } +
fast-path-config={ 10 50 1000 8000 200 1000 }
interleave-path-config={ 0 0 0 0 0 0 16 16 }
margin-config={ 6 6 0 0 31 31 0 0 0 0 0 0 0 0 }
thresh-profile = default
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
AL-DMT/{ shelf-1 slot-4 1 } written

Line-State, Physical-Address, Physical-Statistic,
Physical-Status
```

See Also: Enabled, Fast-Path-Config, Interleave-Path-Config, Line-Config, Margin-Config

AL-DMTADSL-ATM

Description: *Not currently used.* Controls whether code images for DMT-ADSL-ATM modules should be stored in Flash memory.

Usage: Valid values are as follows:

- auto—Load code image if there is a module installed of that type. Otherwise, skip it. This is the default.

- load—Load code image when present in tar file

- skip—Skip code image when present in tar file

Example: al-dmtadsl-atm = auto

Location: Load-Select

See Also: Unknown-Cards

AL-DMT-Stat (profile)

Description: A read-only profile that provides statistics and connection status for each rate adaptive digital subscriber lines (RADSL) interface.

Usage: To make AL-DMT-Stat the working profile and list its contents, use the Read and List commands.

Example:

```
admin> read al-dmt-stat {1 4 1}
AL-DMT-STAT/{ shelf-1 slot-4 1 } read

admin> list
[in AL-DMT-STAT/{ shelf-1 slot-4 1 }]
physical-address*={ shelf-1 slot-4 1 }
line-state=active
physical-status={ 0 coe port-up 960000 8000000 1.4.1 2 0 1 +
physical-statistic={ { 0 9 4 } yes 1 passed 8 0 8 5 2 12 0 +
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
AL-DMT-STAT/{ shelf-1 slot-4 1 } written
```

See Also: Line-State, Physical-Address, Physical-Statistic, Physical-Status

Alias-Name

Description: Specifies a string of up to 20 characters to represent the specified address of ATM-Addr-Alias.

Usage: Provides a more convenient way of accessing the ATM address. The default is null.

Example: Alias-Name = Node1Alias

Location: Atm-Addr-Alias

Allow-Auth-Config-Rqsts

Description: Specifies whether the unit allows external configuration requests in authentication processing.

Usage: Valid values are as follows:

- Yes—Specifies that the unit allows external configuration requests in authentication processing. This is the default.

- No—Specifies that the unit does not allow external configuration requests in authentication processing.

Example: set allow-auth-config-rqsts = no

Location: External-Auth > Rad-Auth-Client

Allow-Code

Description: Specifies whether permission to upload code to the Stinger unit and use the following code-level commands is enabled or disabled:

- Format—(to prepare a flash card for use

- Fsck—to check file system on a flash card

Usage: Valid values are as follows:

- Yes—Grants permission to upload code to the Stinger unit.
- No—Denies permission to upload code to the Stinger unit. This is the default.

Example: `set allow-code = yes`

Location: User *name*

See Also: Allow-Diagnostic, Allow-Password, Allow-System, Allow-Termserv, Allow-Update

Allow-Diagnostic

Description: Specifies permission to use the following diagnostic commands:

Command	Description
Clock-Source	Display clock-source statistics.
Debug	Enable or disable diagnostic output.
Device	Start or halt a device.
Ether-Display	Display the contents of received Ethernet packets.
If-Admin	Administer an interface.
Open	Start a session with a line interface or trunk module.
Ping	Ping the specified host.
Slot	Administer a line interface or trunk module.
Telnet	Open a Telnet session.
Traceroute	Display route statistics.
Uptime	Report how long the system has been up and how long individual modules have been up.

Usage: Valid values are as follows:

- Yes—Grants permission to use diagnostic commands.
- No—Denies permission to use diagnostic commands. This is the default.

Example: `set allow-diagnostic = yes`

Location: User *name*

See Also: Allow-Password, Allow-System, Allow-Termserv, Allow-Update

Allow-Guaranteed-Up-Stream-Bandwidth

Description: Specifies the guaranteed upstream bandwidth for a slot.

Usage: Specify an integer in kilobits per second (Kpbs). The default is 44000 Kbps for each line interface module (LIM), which distributes the sum of 622 Mbps across the 14 LIM slots.

Example: `set allow-guaranteed-up-stream-bandwidth = 80000`

Dependencies: Even when the system is heavily loaded or the network is congested, the slot should be able to send upstream traffic at the rate of the specified `Allow-Guaranteed-Up-Stream-Bandwidth` value. The total of all guaranteed upstream bandwidth for all slots cannot exceed the maximum upstream capacity of the system. Typically, slots with a high requirement for real-time traffic need high guaranteed bandwidth.

Location: ATM-Config > Bandwidth-Config > Bandwidth-Config *N*

See Also: Allow-Max-Up-Stream-Bandwidth

Allow-Max-Up-Stream-Bandwidth

Description: Specifies the maximum upstream bandwidth for the slot.

Usage: Specify a value in kilobits per second (Kbps) from 0 to 155000 (OC3 speed). The default is 70,000 Kbps for each line interface module (LIM), and 1000 Kbps for each control module.

Example: `set allow-max-up-stream-bandwidth = 80000`

Dependencies: Note that 155 Mb throughput on a LIM is not guaranteed traffic. If a LIM allows traffic up to that limit, the system makes a best-effort attempt to deliver it.

Location: ATM-Config > Bandwidth-Config > Bandwidth-Config *N*

See Also: Allow-Guaranteed-Up-Stream-Bandwidth

Allow-Password

Description: Specifies permission to view passwords.

Usage: Valid values are as follows:

- `Yes`—Grants permission to view passwords.
- `No`—Denies permission to view passwords.

Example: `set allow-password = yes`

Location: User *name*

See Also: Allow-Diagnostic, Allow-System, Allow-Termserv, Allow-Update

Allow-System

Description: Enables or disables permission to use the following system commands:

Command	Description
ARPtable	Display or modify the Stinger unit address resolution protocol (ARP) table.
Clr-History	Clear the fatal-error history log.
Connection	Display the connection-status window.
Dir	List profiles and profile types.

Command	Description
Dircode	Show the contents of the PCMCIA module code.
Fatal-History	List the fatal-error history log.
Get	Display settings in a profile.
IProute	Add or delete IP routes.
Line	Display the line-status window.
List	List settings in the working profile.
Log	Display and control the event-log window.
Netstat	Display the routing or interface tables.
New	Create a new profile.
Read	Make the specified profile the working profile.
Refresh	Refresh the remote configuration.
Set	Specify a value.
Show	Show shelves, slots, ports, or items.
Status	Display the system status or hide the status window.
Userstat	Display user session status.
Version	Display software-version information.
View	Change the contents of a status window.

Usage: Valid values are as follows:

- Yes—Grants permission to use system commands.
- No—Denies permission to use system commands. This is the default.

Example: `set allow-system = yes`

Location: User *name*

See Also: Allow-Diagnostic, Allow-Termserv, Allow-Update

Allow-Termserv

Description: Enables or disables permission to use the terminal server and its commands.

Usage: Valid values are as follows:

- Yes—Grants permission to use the terminal server and its commands.
- No—Denies permission to use the terminal server and its commands. This is the default.

Example: `set allow-termserv = yes`

Location: User *name*

See Also: Allow-Code, Allow-Diagnostic, Allow-Password, Allow-System, Allow-Update

Allow-Update

Description: Specifies permission to use the following update commands:

Command	Description
Date	Set the system date.
Delete	Delete the specified profile.
Load	Load code or saved configuration to flash.
NVRAM	Clear the configuration and reboot the system.
Reset	Reboot the system.
Save	Save a profile for a future restore.
Write	Store the working profile and save changes.

Usage: Valid values are as follows:

- Yes—Grants permission to use update commands.

- No—Denies permission to use update commands. This is the default.

Example: set allow-update = yes

Location: User *name*

See Also: Allow-Code, Allow-Diagnostic, Allow-Password, Allow-System

Alpha-Cell-Delin-Value

Description: Specifies the cell delineation alpha value.This value designates the number of consecutive cells with incorrect header error checks (HEC) to leave the SYNC state to go to the HUNT state.

Usage: Specify a number from one to 16.

Example: alpha-cell-delin-value = 7

Location: IMAhw-Config { shelf-*N* slot-*N N*}]

See Also: Alpha-IMA-Value, Beta-IMA-Value, Delta-Cell-Delin-Value, Gamma-IMA-Value

Alpha-IMA-Value

Description: Specifies the alpha value used to specify the number of consecutive invalid IMA Control Protocol (ICP) cells to be detected before changing to IMA HUNT state from the SYNC state.

Usage: Specify the number one or the number 2.

Example: set alpha-ima-value = 2

Location: IMAhw-Config { shelf-*N* slot-*N N*}]

See Also: Beta-IMA-Value, Delta-Cell-Delin-Value, Gamma-IMA-Value

Analog-Encoding

Description: Specifies the encoding standard for digitized analog data. The Stinger unit uses the value you specify for all codecs on the Stinger unit.

Usage: Valid values are as follows:

- U-Law—Specifies U-Law encoding.

- A-Law s—Specifies A-Law encoding.

Example: set analog-encoding = u-law

Location: System

Annexb-DMTADSL

Description: *Not currently used.* Specifies whether code images for 12-port ANNEX B DMT-ADSL-ATM modules should be stored in Flash memory.

Usage: Valid values are as follows:

- auto—Load code image if there is a module installed of that type. Otherwise, skip it. This is the default.

- load—Load code image when present in tar file

- skip—Skip code image when present in tar file

Example: annexb-dmtadsl = auto

Location: Load-Select

See Also: Unknown-Cards

ANSI-ADSL-Ver

Description: Indicates the supported issue of the ANSI T1.413 standard (issue 2).

Usage: The ANSI-ADSL-Ver value is read-only.

Example: ansi-adsl-ver = 2

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Status

See Also: Initial-ADSL-Ver

Answer-Defaults (profile)

Description: Configures system defaults for incoming calls. The Stinger unit uses the values in this profile until a caller passes authentication and the Stinger unit retrieves a copy of the caller's profile. In addition, you can use the Answer-Defaults profile to supply defaults for profiles retrieved from remote authentication servers.

Usage: Use the Read and List commands to make Answer-Defaults the working profile and list its contents. For example:

```
admin> read answer-defaults
ANSWER-DEFAULTS read

admin> list
[in ANSWER-DEFAULTS]
use-answer-for-all-defaults = yes
force-56kbps=no
profiles-required=yes
ip-answer={ yes yes no 1 }
session-info={ "" "" no 120 no-idle 120 0 }
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
ANSWER-DEFAULTS written
```

See Also: Force-56Kbps, IP-Answer, Session-Info, Use-Answer-For-All-Defaults

Answer-Number-1

Description: Specifies the first telephone number to be used for the analog device attached to the Stinger.

Usage: The Stinger uses this number, the value in Answer-Number-2, to route all calls it receives with this number to the device.

Example: set answer-number-1 = 747-5775

Location: IDSL {*N N N* } > line-interface

See Also: Channel-Usage, Call-Route-Info, SPID, Phone-Number, Trunk-Group

Answer-Number-2

Description: Specifies a second telephone number to be used for the analog device attached to the Stinger.

Usage: The Stinger uses this number, or the value in Answer-Number-1, to route all calls it receives with this number to the device.

Example: set answer-number-2 = 747-5776

Location: IDSL {*N N N* } > line-interface

See Also: Channel-Usage, Call-Route-Info, SPID, Phone-Number, Trunk-Group

Answer-Originate

Description: Specifies whether the Connection profile enables incoming calls, outgoing calls, or both.

Usage: Valid values are as follows:

- `ans-and-orig`—Specifies that the Stinger unit can both initiate and receive calls over the connection defined in the profile. This is the default.
- `orig-only`—Specifies that the profile can be used only for outgoing calls. The Stinger unit will not answer calls from the profile.
- `ans-only`—Specifies that the profile can be used only for incoming calls. The Stinger unit will not initiate calls from the profile.

Example: `set answer-originate = ans-and-orig`

Dependencies: Answer-Originate does not apply to nailed-up call types.

Location: Connection *station* > Telco-Options

See Also: Nailed-Groups

Apply-To

Description: Specifies the direction in which Type-of-Service (TOS) is enabled.

Usage: Specify one of the following values:

- `input`—Specifies that bits are set in packets received on the interface. This is the default.
- `output`—Specifies that bits are set in outgoing packets only.
- `both`—Specifies that both incoming and outgoing packets are tagged.

Example: `set apply-to = both`

Dependencies: You must set Active=Yes in the TOS-Options subprofile for the Apply-To setting to apply.

Location: Connection *station* > IP-Options > TOS-Options

See Also: Precedence, Type-of-Service

Aps-Receive

Description: *Not currently used.* Reserved for futher study.

Location: OC3-ATM-Stat

Ascend-Enabled

Description: Specifies whether a trap is generated to indicate a change of state in a host interface. All port connections are monitored in a state machine and reported by means of this trap.

Usage: Valid values are as follows:

- `Yes`—Specifies that a trap is generated to indicate a change of state in a host interface. This is the default.

- `No`—Specifies that a trap is not generated to indicate a change of state in a host interface.

Example: `set ascend-enabled = no`

Dependencies: If you set `ascend-enabled = yes`, you must also set `port-enabled = yes`.

Location: Trap *host-name*

See Also: Call-Log-Dropped-Pkt-Enabled, Interface-Sparing Enabled, LIM-Sparing-Enabled

Assign-Address

Description: Spercifies dynamic IP address assignment for incoming calls.

Usage: Valid values are as follows:

- `Yes`—Enables the Stinger unit to assign dynamic IP addresses to incoming calls.

- `No`—Disables dynamic IP address assignment. This is the default.

Example: `set assign-address = yes`

Dependencies: The Stinger unit must have at least one configured pool of IP addresses. You can configure the pool locally or in Remote Authentication Dial-In User Service (RADIUS).

Location: Answer-Defaults > IP-Answer

See Also: IP-Answer

Assign-VPI-VCI

Description: Specifies whether the virtual path identifier and virtual channel identifier (VPI-VCI) of the signaling virtual channel connection (VCC) is assigned locally or by the remote peer.

Usage:

- The default `yes` value indicates that the local stack assigns the VPI-VCI.

- `no` indicates that the remote peer assigns the VPI-VCI

Example: `set assign-vpi-vci = yes`

Location: ATM-IF-Sig-Params *N*> Q2931-Options

See Also: Max-Statenq, Max-Restart, Saal-Retry-Ms, T301-Ms, T303-Num-Retries

AT-Answer-String

Description: Specifies extra AT commands in the answer string of the system's modem configuration:

Usage: Specify one or more valid AT commands, up to a limit of 36 characters. The default is null.

Note: Be very careful when entering AT commands for AT-Answer-String. The system does not prevent you from entering incorrect strings.

Example: The following example sets AT-Answer-String to S37 to 11:

```
admin> read terminal-server
TERMINAL-SERVER read
admin> set modem-configuration AT-answer-string = S37 = 11
admin> write
TERMINAL-SERVER written
```

The new AT-Answer-String setting causes the following string to be sent to the modem:

```
ATS37 = 11A
```

When the modem receives this string, it forces a V.32bis 14400 connection.

Dependencies: Consider the following:

• Do not begin the string with the characters AT. These two characters are automatically added to the beginning of the string before the Stinger unit sends the commands to the modem.

• Do not include an A (answer) or a D (dial) command anywhere in the string. An A command is automatically added to the end of the string. A D command in the answer string causes the call to fail.

• The answer string is the last of four strings sent to the modem when the Stinger unit answers a call. Therefore, the commands you enter can overwrite settings specified elsewhere. For example, if the Max-Baud-Rate sets the maximum baud rate and the AT-Answer-String setting specifies a +MS command with a different baud rate, the AT-Answer-String value overwrites the Max-Baud-Rate value.

Location: Terminal-Server > Modem-Configuration

See Also: 40-DMT-ADSL, Cell-Level, Cell-Mode-First, Max-Baud-Rate, Modem-Transmit-Level

ATM1483Type

Description: Specifies the multiplexing method for carrying multiple protocols over Asynchronous Transfer Mode (ATM) circuits by means of the ATM adaptation layer 5 (AAL5). When a system transfers user data, the RFC 1483 specification is used to encapsulate the packets over AAL5. RFC 1483 outlines vendor-independent ways of transferring multiprotocol encapsulated packets on the ATM network.

Usage: Valid values are as follows:

- `aal5-llc`—Specifies that the protocols are identified by prefixing the Protocol Data Unit (PDU) with an IEEE 802.2 Logical Link Control (LLC) header. This is the default.

- `aal5-vc`—Specifies that the system performs higher-layer protocol multiplexing by creating separate ATM virtual circuits (virtual circuit multiplexing).

Example: `set atm1483type = aal5-vc`

Location: Connection > ATM-Options, Connection > ATM-Connect-Options

See Also: VCI, VPIATM-Addr-Alias (profile)

Description: A profile that lets you associate a text alias with an Asynchronous Transfer Mode (ATM) address or portion of an ATM address, up to a maximum of 22 bytes. After you define an alias, you can use the alias in place of the associated numbers in some contexts. The system also displays the alias name in the output of some commands

Usage: The following set of commands creates an alias for a unit's Private Network-to-Network Interface (PNNI) node ID:

```
admin> new atm-addr-alias node-id-1
ATM-ADDR-ALIAS/node-id-1 read

admin> set address = 60a0474100310031003100310000c07b8e309200

admin> set length = 22

admin> write
ATM-ADDR-ALIAS/node-id-1 written
```

See Also: PNNI-Node-Config (profile)

ATM-Circuit-Profile

Description: *Not currently used.* The atm circuit profile name to be used for this connection.

Usage: This read-only parameter is automatically set by the system for ATM circuits supporting Stinger IDSL connections.

Example: ATM-Circuit-Profile = atmProf1

Location: Connection *station* > ATM-Connect-Options

ATM-Config (profile)

Description: Configures bandwidth-allocation and virtual path identifier (VPI) and virtual channel identifier (VCI) settings for Asynchronous Transfer Mode (ATM) transmissions.

Usage: Use the Read and List commands to make ATM-Config the working profile and list its contents. For example:

Example:

```
admin> list
[in ATM-CONFIG]
slot-vpi-vci-range = [ vpi-0-15-vci-32-127 vpi-0-15-vci-32-127
vpi-0-15-vci-32-+
bandwidth-config = [ { 70000 70000 } { 70000 70000 } { 50000
50000 } { 50000 50+
trunk-cac-config = [ { yes 1:17:1 155520 10 } { yes 1:17:2
155520 10 } { yes 1:
```

To close the profile and save your changes:

```
admin> write
ATM-CONFIG written
```

See Also: Bandwidth-Config N, Slot-VPI-VCI-Range

ATM-Connect-Options

Description: Configures options for the second leg of an Asynchronous Transfer Mode (ATM) circuit. ATM-Connect_options is a subprofile of the Connection profile.

Usage: With a Connection profile as the working profile, list the ATM-Connect-Options subprofile. For example:

```
admin> list atm-connect-options
[in CONNECTION:atm-connect-options]
atm1483type=aal5-llc
vpi=0
vci=32
atm-enabled=yes
nailed-group=0
vp-switching=no
qos-contract=""
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: Connection *station*

See Also: ATM-Enabled, Nailed-Group, QoS-Contract, VCI, VPI

ATM-Enabled

Description: Specifies whether Asynchronous Transfer Mode (ATM) is enabled for the connection.

Usage: Valid values are as follows:

- `Yes`—Specifies that Asynchronous Transfer Mode (ATM) is enabled for the connection.This is the default.

- `No`—Specifies that Asynchronous Transfer Mode (ATM) is not enabled for the connection.

Dependencies: If Encapsulation-Protocol parameter in the connection profile is not set to `ATM` or `ATM-Circuit`, the value specified by `ATM-Enabled` does not apply.

Location: Connection *station* > ATM-Options, Connection *station* > ATM-Connect-Options

See Also: Encapsulation-Protocol

ATM-If-Config (profile)

Description: Configures Asynchronous Transfer Mode (ATM) interfaces.

```
admin> list
[in ATM-IF-CONFIG/{ { shelf-1 slot-10 0 } 4 } (new)]
address* = { { shelf-1 slot-10 0 } 4 }
base-config = { 255 8192 8 13 0 0 0.0.0.0 ""
39:84:0f:80:01:bc:72:00:01:1a:dd:9+
extension-config = { atmf-uni-pvc-only other 0 1 5 4 private 255
255 32 2 2 no +
```

See Also: Base-Config, Extension-Config

ATM-If-Delay

Description: Specifies the minimum time in seconds for IMA data cell rate (IDCR) changes between the subsequent ATM layer. Pertains to inverse multiplexing ATM (IMA).

Usage: Valid range is from zero to 2147483647.

Example: `set atm-if-delay = 0`

Location: IMAGROUP/*name*

See Also: Expected-Far-End-IMA-Id

ATM-If-Sig-Param (profile)

Description: A profile for configuring Asynchronous Transfer Mode (ATM) interface signaling parameters. This profile contains two subprofiles, included in the following listing.

Usage:

```
esprit> new atm-if-sig-params
ATM-IF-SIG-PARAMS/{ { any-shelf any-slot 0 } 0 } read

esprit> list
[in ATM-IF-SIG-PARAMS/{ { any-shelf any-slot 0 } 0 } (new)]
address* = { { any-shelf any-slot 0 } 0 }
q2931-options = { 2 1 180000 4000 30000 30000 10000 10000 30000 120000
60000 40+
qsaal-options = { 50 4 25 67 1000 0 0 0 15000 no no no }

esprit> list q2931-options
[in ATM-IF-SIG-PARAMS/{ { any-shelf any-slot 0 } 0 }:q2931-options
(new)]
max-restart = 2
max-stateq = 1
```

```
t301-ms = 180000
t303-ms = 4000
t306-ms = 30000
t308-ms = 30000
t309-ms = 10000
t310-ms = 10000
t313-ms = 30000
t316-ms = 120000
t317-ms = 60000
t322-ms = 4000
t331-ms = 60000
t333-ms = 10000
t397-ms = 180000
t398-ms = 4000
t399-ms = 14000
saal-retry-ms = 10000
t303-num-reties = 1
t308-num-retries = 1
t316-num-retries = 1
t322-num-retries = 1
t331-num-retries = 1
assign-vpi-vci = yes


esprit> list .. qsaal-options
[in ATM-IF-SIG-PARAMS/{ { any-shelf any-slot 0 } 0 }:qsaal-options
(new)]
window-size = 50
max-cc = 4
max-pd = 25
max-stat = 67
tcc-ms = 1000
tpoll-ms = 0
tkeepalive-ms = 0
tnoresponse-ms = 0
tidle-ms = 15000
poll-after-retransmission = no
repeat-ustat = no
ustat-rsp-to-poll = no
```

ATM-If-Stat (profile)

Description: Indicates information about the state of the physical and logical interfaces.
Following is a sample ATM-IF-Stat profile

```
[in ATM-IF-STAT/{ { shelf-1 slot-1 20 } 0 }]
address* = { { shelf-1 slot-1 20 } 0 }
if-number = 159
nailed-group = 20
port-state = down
signalling-state = not-configured
pnni-link-state = not-configured
```

ATM-Internal (profile)

Description: Configures internal Asynchronous Transfer Mode (ATM) network settings.

Usage: Use the read command to make this the current profile, then list it.

```
admin> read atm-internal {1 13 1}
ATM-INTERNAL/{ shelf-1 slot-13 1 } read
admin> list
[in ATM-INTERNAL/{ shelf-1 slot-13 1 }]
name = 1:13:1
physical-address* = { shelf-1 slot-13 1 }
enabled = no
line-config = { 633 }.
```

Dependencies: The ATM-internal network profile is enabled by default (enabled = yes). If you have previously disabled it, enable it if you intend to use an IDSL module, and save your changes.

ATM-Internal-Stat

Description: The system creates a read-only ATM-Internal-Stat profile for each ATM internal interface. These read-only profiles provide information about connection status.

Usage: For example:

```
admin> read atm-internal-stat {1 13 1}
ATM-INTERNAL-STAT/{ shelf-1 slot-13 1 } read
admin> list
[in ATM-INTERNAL-STAT/{ shelf-1 slot-13 1 }]
physical-address* = { shelf-1 slot-13 1 }
line-state = activ
```

ATM-Options

Description: A subprofile of the connection profile that configures options for configuring an Asynchronous Transfer Mode (ATM) terminating connection on the first (incoming) leg of an ATM circuit.

Usage: With a Connection profile as the working profile, list the ATM-Options subprofile. For example:

```
admin> list atm-options
[in CONNECTION/"":atm-options (new)]
atm1483type = aal5-llc
vpi = 0
vci = 35
atm-enabled = yes
nailed-group = 1
cast-type = p2p
conn-kind = pvc
vp-switching = no
target-atm-address =
00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00
```

```
target-select = required
target-vpi = 0
target-vci = 0
spvc-retry-interval = 10
spvc-retry-threshold = 1
spvc-retry-limit = 0
atm-direct-enabled = no
atm-direct-profile = ""
vc-fault-management = none
vc-max-loopback-cell-loss = 1
atm-circuit-profile = ""
```

Use the Set command to modify the settings in the subprofile, and the Write command to save them. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: Connection *station*

See Also: ATM-Enabled, Nailed-Group, QoS-Contract, VCI, VPI

ATM-Prefix (profile)

Description: Configures an address or a prefix setting explicitly so that the system uses the value you specify rather than the system-generated default.

Usage: This profile includes three subprofiles, listed here for convenience, pnni-node-prefix, spvc-addr-prefix, svc-addr-prefix.

```
[in ATM-PREFIX/default]
contract-name* = default
short-flag = no
pnni-node-prefix = { 13 39:84:0f:80:01:bc:7c2:00:01:bc:e7:6c:02 }
spvc-addr-prefix = { 0 00:00:00:00:00:00:00:00:00:00:00:00:00 }
svc-addr-prefix = { 0 00:00:00:00:00:00:00:00:00:00:00:00:00 }

[in ATM-PREFIX/default:pnni-node-prefix]
length = 13
address = 39:84:0f:80:01:bc:72:00:01:bc:e7:6c:02

[in ATM-PREFIX/default:spvc-addr-prefix]
length = 0
address = 00:00:00:00:00:00:00:00:00:00:00:00:00

[in ATM-PREFIX/default:svc-addr-prefix]
length = 0
address = 00:00:00:00:00:00:00:00:00:00:00:00:00
```

You can use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
ATM-prefix/Default written
```

Dependencies: In the ATM-Prefix profile, when the SPVC and SVC prefix addresses are zero (0), the SPVC prefix and SVC prefix take their value from the PNNI node prefix. Whenever you explicitly configure an address or a prefix setting, the system uses the value you specify

rather than the system-generated default. If you delete the ATM-Prefix profile, the system creates a new one at the next system startup and derives the default prefix from the primary controller serial number.

See Also: PNNI-Node-Config (profile)

ATMPVC-Stat (profile)

Description: Use this profile to monitor the status of an asynchronous-transfer mode (ATM) permanent virtual channel (PVC).

Usage: Following is an example of the read-only profile listing, which includes the associated subprofiles.

```
techpubs> dir atmpvc-stat
0  10/31/2000 19:00:20  con13_20_1_SYXC
techpubs> read atmpvc-stat con13_20_1_SYXC
ATMPVC-SAT/con13_20_1_SYXC read
techpubs> list
circuit-name* = con13_20_1_SYXC
pvc-type = connecting
current-state = pvc-data-transfer
vcc-members = [ { shelf-1 trunk-module-1 1 0 120 801 } { shelf-1
slot-13 1 0 12+
magic-keys = [ 0 201326688 ]
techpubs> list vcc-members
[in ATMPVC-STAT/con13_20_1_SYXC:vcc-members]
vcc-members[1] = { shelf-1 trunk-module-1 1 0 120 801 }
vcc-members[2] = { shelf-1 slot-13 1 0 120 633 }
techpubs> list .. magic-keys
[in ATMPVC-STAT/con13_20_1_SYXC:magic-keys]
magic-keys[1] = 0
magic-keys[2] = 201326688
techpubs> list vcc-member 1
[in ATMPVC-STAT/con13_20_1_SYXC:vcc-members[1]]
shelf-number = shelf-1
slot-number = trunk-module-1
port = 1
vpi = 0
vci = 120
nailed-group = 801
```

ATM-QoS (profile)

Description: Configures Quality of Service (QoS) values for an Asynchronous Transfer Mode (ATM) link.

Usage: Use the Read and List commands to create a new ATM-QoS profile and list its contents. As follows in the sample:

Example:

```
admin> read atm-qos unit1
ATM-QOS/unit1 read

admin> list
[in ATM-QOS/unit1]
contract-name*=unit1
qos-class = cbr
peak-rate-kbits-per-sec = 16
peak-cell-rate-cells-per-sec = 37
sustainable-rate-kbits-per-sec = 16
sustainable-cell-rate = 37
ignore-cell-delay-variation-tolerance = yes
cell-delay-variation-tolerance = 20
ignore-max-burst-size = yes
max-burst-size = 4
aal-type = aal-0
early-packet-discard = no
partial-packet-discard = no
tag-or-discard = discard
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
ATM-QOS/unit1 written
```

Note: To disable peak cell rate (PCR) policing, set `peak-rate-kbits-per-sec` and `cell-delay-variation-tolerance` values to zero (0). To disable sustainable cell rate (SCR) policing, set `sustainable-rate-kbits-per-sec` and `max-burst-size` values to zero.

See Also: AAL-Type, Contract-Name, Early-Packet-Discard, Partial-Packet-Discard, QoS-Class

ATM-QoS-Options

Description: Subprofile of the Connection profile that specifies the traffic contract name(s) for the upstream and downstream traffic on the Asynchronous Transfer Mode (ATM) circuit.

Usage: With a Connection profile as the working profile, list the ATM-QoS-Options subprofile. For example:

```
admin> list atm-qos-options
[in CONNECTION/tim:atm-qos-options]
usr-up-stream-contract=""
usr-dn-stream-contract=""
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: Connection *station*

See Also: Usr-Dn-Stream-Contract, Usr-Up-Stream-Contract

ATM-SPVC-Addr-Config (profile)

Description: Configures the address for an Asynchronous Transfer Mode (ATM) soft permanent virtual channel (SPVC).

Usage: Following is an example of a listing of the profile.

```
techpubs> read atm-spvc-addr-config { { shelf-1 slot-1 1 } 0 }
ATM-SPVC-ADDR-CONFIG/{ { shelf-1 slot-1 1 } 0 } read
techpubs> list
[in ATM-SPVC-ADDR-CONFIG/{ { shelf-1 slot-1 1 } 0 }]
index* = { { shelf-1 slot-1 1 } 0 }
spvc-atm-address =
39:84:0f:80:01:bc:72:00:01:11:37:93:00:ff:74:09:b7:3d:01:00
```

ATM-SPVC-Config (profile)

Description: Configures an Asynchronous Transfer Mode (ATM) soft permanent virtual channel (SPVC).

Usage: Following is an example of the profile listing

```
techpubs> new atm-spvc-config
ATM-SPVC-CONFIG read
techpubs> list
[in ATM-SPVC-CONFIG (new)]
failure-trap-enable = no
failure-notification-interval = 30
```

Dependencies: This profile only appears on the interface when a corresponding Simple Network Management Protocol (SNMP) MIB table has been entered. The profile disappears from the interface when that MIB table is removed.

ATMVCC-Stat (profile)

Description: Indicates read-only information about the state of virtual channel connections (VCCs) on an Asynchronous Transfer Mode (ATM) link.

Usage: Use the Read and List commands to make ATMVCC-Stat the working profile and list its contents. For example:

```
admin> list
[in ATMVCC-STAT/{ shelf-1 trunk-module-2 2 0 103 }]
vcc-ident*={ shelf-1 trunk-module-2 2 0 103 }
circuit-name=unit1
current-state=vcc-data-transfer
vcc-type=connecting
magic-key=16777312
```

To close the profile and save your changes:

```
admin> write
ATMVCC-Stat/{ shelf-N trunk-module-N N N N } written
```

See Also: Circuit-Name, Current-State

ATM-VCL-Config (profile)

Description: Configures an Asynchronous Transfer Mode (ATM) virtual channel link (VCL).

Usage: Following is an example of the profile listing which includes the associated subprofiles.

```
techpubs> new atm-vcl-config
ATM-VCL-CONFIG/{ { { any-shelf any-slot 0 } 0 } 0 0 } read
techpubs> list
[in ATM-VCL-CONFIG/{ { { any-shelf any-slot 0 } 0 } 0 0 } (new)]
id* = { { { any-shelf any-slot 0 } 0 } 0 0 }
rx-traffic-desc = 1
tx-traffic-desc = 1
aal-type = not-present
tx-sdu-size = 0
rx-sdu-size = 0
aal5-encaps = llc-encapsulation
mcast-type = p2p

techpubs> list id 1
[in ATM-VPL-CONFIG/{ { { any-shelf any-slot 0 } 0 } 0 } (new)]
id* = { { { any-shelf any-slot 0 } 0 } 0 }
rx-traffic-desc = 1
tx-traffic-desc = 1
mcast-type = p2p
call-kind = pvc
```

Dependencies: This profile only appears on the interface when a corresponding Simple Network Management Protocol (SNMP) MIB table has been entered. The profile disappears from the interface when that MIB table is removed.

ATM-VPL-Config (profile)

Description: Configures an Asynchronous Transfer Mode (ATM) virtual path link (VCL).

Usage: Following is an example of the profile listing, which includes the associated subprofiles.

```
techpubs> new atm-vpl-config
ATM-VPL-CONFIG/{ { { any-shelf any-slot 0 } 0 } 0 } read
techpubs> list
[in ATM-VPL-CONFIG/{ { { any-shelf any-slot 0 } 0 } 0 } (new)]
id* = { { { any-shelf any-slot 0 } 0 } 0 }
rx-traffic-desc = 1
tx-traffic-desc = 1
mcast-type = p2p
call-kind = pvc
techpubs> list id 1
[in ATM-VPL-CONFIG/{ { { any-shelf any-slot 0 } 0 } 0
}:id:address (new)]
physical-address = { any-shelf any-slot 0 }
logical-item = 0
```

Dependencies: This profile only appears on the interface when a corresponding Simple Network Management Protocol (SNMP) MIB table has been entered. The profile disappears from the interface when that MIB table is removed.

Attenuation-Down

Description: Indicates the current downstream attenuation in dB. The parameter value is read-only.

Usage: Enables you to check the decrease in power of the signal in the downstream communication.

Example: `attenuation-down = 6`

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Attenuation-Up

Attenuation-Up

Description: Indicates the current upstream attenuation in dB. This parameter is read only.

Usage: Enables you to check the decrease in power of the signal in the upstream communication. The Attenuation-Up value is read-only.

Example: `attenuation-up = 41`

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Attenuation-Down

Atuc-15min-Lofs

Description: Specifies the number of loss-of-frame seconds encountered by a DSL interface within any given 15-minute data collection period before a Simple Network Management Protocol (SNMP) notification is sent.

Usage: One notification is sent per 15 minute interval per interface. A value of 0 disables the trap. Enter a value from 0 through 900.

Example: `set atuc-15min-lofs = 10`

Location: DSL-Threshold *name*

Atuc-15min-Loss

Description: Specifies the number of loss-of-signal-seconds encountered by a DSL interface within any given 15-minute data collection period before a Simple Network Management Protocol (SNMP) notification is sent.

Usage: One notification is sent per 15-minute interval per interface. A value of 0 disables the trap. Enter a value from 0 through 900.

Example: `set atuc-15min-loss = 28`

Location: DSL-Threshold *name*

See Also: Atuc-15min-Lols

Atuc-15min-Lols

Description: Specifies the number of loss-of-link seconds encountered by a DSL interface within any given 15-minute data collection period before a Simple Network Management Protocol (SNMP) notification is sent.

Usage: One notification is sent per interval per interface. A value of 0 disables the notification. Enter a value from 0 through 900.

Example: set atuc-15min-lols = 20

Location: DSL-Threshold *name*

Atuc-15min-Lprs

Description: Specifies the number of loss-of-power seconds encountered by a DSL interface within any given 15-minute data collection period before a Simple Network Management Protocol (SNMP) notification is sent

Usage: One notification is sent per interval per interface. A value of 0 disables the notification. Enter a value from 0 through 900.

Example: set atuc-15min-lprs = 10

Location: DSL-Threshold *name*

Atuc-15min-Ess

Description: Specifies the number of errored seconds encountered by a DSL interface within any given 15-minute data collection period before a Simple Network Management Protocol (SNMP) notification is sent

Usage: One notification is sent per interval per interface. A value of zero (0) disables the notification. Enter a value from 0 through 900.

Example: set atuc-15min-ess = 10

Location: DSL-Threshold *name*

Atuc-Fast-Rate-Up

Description: Specifies the amount of change in rate of a fast channel causing a notification to be sent.

Usage: A notification (trap)

Example: is produced when the value of Atuc-Fast-Rate-Up exceeds the value of an internal parameter based on the channel rate up. Enter a value from 0 through 2147483647. A value of 0 disables the trap.

Example: `set atuc-fast-rate-up = 0`

Location: DSL-Threshold *name*

See Also: Atuc-Interleave-Rate-Up

Atuc-Interleave-Rate-Up

Description: Specifies the amount of change in rate of an interleaved channel causing a notification to be sent.

Usage: A notification trap is produced when the value of Atuc-Interleave-Rate-Up exceeds the value of an internal parameter based on the channel rate up. Enter a value from zero (0) through 2147483647. A value of 0 disables the trap.

Example: `set atuc-interleave-rate-up = 0`

Location: DSL-Threshold *name*

See Also: Atuc-Fast-Rate-Up

Atuc-Fast-Rate-Down

Description: Specifies the amount of change in rate of a fast channel causing a notification to be sent.

Usage: A notification is produced when when the value of Atuc-Fast-Rate-Down exceeds the value of an internal parameter based on the channel rate down. Enter a value from zero (0) through 2147483647. A value of 0 disables the trap.

Example: `set atuc-fast-rate-down = 0`

Location: DSL-Threshold *name*

See Also: Atuc-Fast-Rate-Up

Atuc-Interleave-Rate-Down

Description: Specifies the amount of change in rate of an interleaved channel causing a notification to be sent.

Usage: A notification is produced when the value of Atuc-Interleave-Rate-Down exceeds the value of an internal parameter based on the channel rate down. Enter a value from zero (0) through 2147483647. A value of 0 disables the trap.

Example: `set atuc-interleave-rate-down = 0`

Location: DSL-Threshold *name*

See Also: Atuc-Fast-Rate-Up

Atuc-Init-Failure-Trap

Description: Enables/disables InitFailureTrap.

Usage: Specify enable or disable.

Example: `set atuc-init-failure-trap = disable`

Location: DSL-Threshold *name*

See Also: Atuc-15min-Lofs, Atuc-Init-Failure-Trap, Atuc-Interleave-Rate-Down, Atuc-Interleave-Rate-Up

Authentication-Enabled

Description: Specifies whether the system generates a trap when an authentication failure occurs.

Usage: Valid values are as follows:

- Yes—Specifies that the system generates a trap when an authentication failure occurs. This is the default.
- No—Specifies that the system does not generate a trap when an authentication failure occurs.

Example: `set authentication-enabled = no`

Location: Trap *host-name*

See Also: Auth-Type

Auth-Attribute-Type

Description: Specifies the attribute(s) used for session matching.

Usage: Valid values are as follows

- Rad-Serv-Attr-Any—Specifies that the first Remote Authentication Dial-In User Service (RADIUS) attribute is used for session matching. This is the default.
- Rad-Serv-Attr-Key—Specifies that the session key is used for session matching.
- Rad-Serv-Attr-All—Specifies that all attributes must match for session matching.

Example: `set auth-attribute-type = rad-serv-attr-any`

Dependencies: If the Rad-Serv-Enable parameter in the External-Auth profile is set to No, Auth-Attribute-Type does not apply.

Location: External-Auth > Rad-Auth-Server

See Also: Rad-Serv-Enable

Auth-Boot-Host

Description: Specifies the IP address of the authentication boot host.

Usage: Specify the IP address in dotted quad format.

Example: set auth-boot-host = 10.2.3.4

Location: External-Auth > Rad-Auth-Client

See Also: Auth-Boot-Port

Auth-Boot-Port

Description: Specifies the the user datagram protocol (UDP) port to use for RADIUS authentication.

Usage: Specify a number between zero (0) and 65535.

Example: set auth-boot-port = 1111

Location: External-Auth > Rad-Auth-Client

See Also: Auth-Boot-Host

Auth-Client *N*

Description: Specifies up to nine IP addresses of Remote Authentication Dial-In User Service (RADIUS) clients permitted to issue RADIUS commands for session termination and filter changes.

Usage: Specify an IP address in dotted decimal notation. The address 255.255.255.255 indicates that any client can issue RADIUS commands. (Currently, a maximum of nine clients is supported.) The default is 0.0.0.0, which indicates that no client can issue RADIUS commands.

Example: set auth-client 1 = 10.2.3.4

Dependencies: If the Rad-Serv-Enable parameter in the External Auth profile is set to no, Auth-Client N does not apply. In addition, if you do not use Auth-Netmask *N* to supply a subnet mask, the system supplies a default subnet mask based on the address class.

Location: External-Auth > Rad-Auth-Server

See Also: Auth-Key, Auth-Netmask N (N = 1–9), Auth-Port, Auth-Server-N, Auth-Src-Port, Auth-Timeout, Rad-Auth-Server, Rad-Serv-Enable

Auth-Frm-Adr-Start

Description: Specifies whether to send a second RADIUS Accounting Start record when the RADIUS Framed-Address value is assigned.

Usage: Valid values are as follows:.

- `Yes`—Enables the Stinger unit to send a second RADIUS Accounting Start record when the RADIUS Framed-Address value is assigned.
- `No`—Prevents the Stinger unit from sending a second RADIUS Accounting Start record.

Example: `set auth-frm-adr-start = yes`

Location: External-Auth > Rad-Auth-Client

See Also: Rad-Auth-Client

Auth-ID-Fail-Return-Busy

Description: Specifies whether the Stinger unit returns User Busy (decimal 17) or Normal Call Clearing (decimal 16) as the Cause Element in ISDN Disconnect packets when called line ID (CLID) or called-number authentication fails.

Valid values are as follows:

Usage:

- `Yes` —Specifies that the Stinger unit returns User Busy (decimal 17) when CLID or called-number authentication fails.
- `No` —Specifies that the Stinger unit returns Normal Call Clearing (decimal 16) when called line ID (CLID) or called-number authentication fails. This is the default.

Example: `set auth-id-fail-return-busy = yes`

Location: External-Auth > Rad-Auth-Client

See Also: Auth-ID-Timeout-Return-Busy

Auth-Id-Max-Retry-Time

Description: Specifies the maximum time limit to spend retrying RADIUS servers during the process of id authentication.

Usage: Specify a number between zero (0) and 10. A value of 0 sets the limit to the internal default value.

Example: `set auth-id-max-retry-time = 0`

Location: External-Auth > Rad-Auth-Client

See Also: Auth-Boot-Host, Auth-Boot-Port, Auth-Pool

Auth-ID-Timeout-Return-Busy

Description: Specifies whether the Stinger unit returns User Busy (decimal 17) or Normal Call Clearing (decimal 16) as the Cause Element in ISDN Disconnect packets when CLID or called-number authentication times out.

Usage: Valid values are as follows:

*   `Yes`—Specifies that the Stinger unit returns User Busy (decimal 17) when CLID or called-number authentication times out.
*   `No`—Specifies that the Stinger unit returns Normal Call Clearing (decimal 16) when CLID or called-number authentication times out. This is the default.

Example: `set auth-id-timeout-return-busy = yes`

Location: External-Auth > Rad-Auth-Client

See Also: Auth-ID-Fail-Return-Busy

Auth-Keep-User-Name

Description: Specifies how to handle the User-Name attribute.

Usage: Valid values are as follows:

*   `change-name`—Specifies that the name provided by the server is used for the status display and for RADIUS accounting purposes. This is the default.
*   `keep-name`—Specifies that the Stinger unit does not use the User-Name returned by the server. If a name has been specified (that is, if called line ID (CLID) or dialed number identification service (DNIS) authentication is not used), the system uses that name. Otherwise, it uses the name sent to the server for authentication.
*   `keep-realm-name`—Specifies that if the user name sent to the server for authentication is in a realm (for example, if it contains one of the characters @,\,/, or %), the system behaves as if `Auth-Keep-User-Name` were set to `Keep-Name`. Otherwise, the system behaves as if `Change-Name` were specified.

Example: `set auth-keep-user-name = keep-name`

Dependencies: A user authenticated by called line ID (CLID) or dialed number identification service (DNIS) will appear to have the CLID or DNIS number as his or her user name. If this condition is a problem, set Auth-Keep-User-Name to Keep-Realm-Name.

Location: External-Auth > Rad-Auth-Client

See Also: Auth-Realm-Delimiters

Auth-Key

Description: Specifies an authentication key in one of two profiles. You configure the parameter setting either directly or indirectly depending on which profile the parameter is in.

Usage: The Auth-Key parameter appears in the Rad-Auth-Client subprofile of the External-Auth profile and in the SNMPV3-USM-User *name* profile.

- In the Rad-Auth-Client subprofile, the Auth-Key parameter specifies an authentication key that appears in external authentication configurations. Specify a string of up to 22 characters. The default is null.

  Note: For security, the specified string is hidden when the Auth-Key parameter is displayed. If you specify a null value, the system returns the following warning:

  ```
  warning: auth-key is empty (bad for security)
  ```

- In the SNMPv3-USM-User name profile, you do not set this string directly in most cases. You use the snmpAuthPass command to generate the value. If you have permission to view passwords, the authentication key appears as a string with escape sequences for save and restore purposes. Otherwise, the authentication key appears as a row of asterisks. The default is null.

  If you change the value of Auth-Key directly, keep in mind that the length of the escape sequence must be 10 (16d in hexadecimal) if Message Digest 5 (MD5) is in use and 14 (20d in hexadecimal) if the Secure Hash Algorithm (SHA) is in use.If you specify an invalid value, the unit uses the previous key, if any, to communicate with the SNMP manager. If no previous key exists, this USM user cannot communicate with the network until a valid key is set by means of the snmpAuthPass command.

Example:

- For the Auth-Key parameter in the Rad-Auth-Client profile)

  ```
  set auth-key =
  ```

- In the SNMPv3-USM-User *name* profile. Suppose you use the snmpAuthPass command to generate the following 16-byte string:

  ```
  27 0a dc 75 f8 98 e5 7c 4c 03 22 7d dd ac 0d ef
  ```

  The system displays it as the following Auth-Key value:

  ```
  '\x0a\xdcu\xf8\x98\xe5|L\x03"}\xdd\xac\x0d\xef
  ```

Dependencies: When the Auth-Key parameter is in the SNMPv3-USM-User *name* profile, consider the following:

- You must generate the authentication key by means of the snmpAuthPass command before the SNMPv3-USM-User profile can be used for communication with the SNMP manager.

- If you change the authentication protocol from MD5 to SHA (or vice versa), you must change the authentication key by means of the snmpAuthPass command. The previous protocol-and-key combination is used until you specify a new one.

If Auth-Protocol is No-Auth, Auth-Key does not apply.

Location: External-Auth > Rad-Auth-Client, SNMPv3-USM-User *name*

See Also: Auth-Port, Auth-Server-N, Auth-Src-Port, Auth-Timeout, IP-Options, Priv-Key, Rad-Auth-Client

Auth-Netmask *N*

Description: Specifies up to nine subnet masks. The Stinger unit matches each mask to the IP addresses of a Remote Authentication Dial-In User Service (RADIUS) client permitted to issue RADIUS commands for session termination and filter changes.

Usage: Specify a subnet mask in dotted decimal notation. The default is 0.0.0.0.

Example: `set auth-netmask 1 = 255.255.255.248`

Dependencies: If the Rad-Serv-Enable parameter is set to No, or if no Auth-Client N setting specifies an IP address, Auth-Netmask *N* does not apply.

Location: External-Auth > Rad-Auth-Server

See Also: Auth-Port, Auth-Server-N, Auth-Src-Port, Auth-Timeout, IP-Options, Priv-Key, Rad-Auth-Client

Auth-Pool

Description: Specifies allocation of an IP address from the default pool to a dial-in user.

Permission level: If Yes, an IP address is allocated from the default pool and passed to the RADIUS server during RADIUS authentication. This address is assigned to the dial-in user for the duration of the connection.

Usage: Valid values are as follows:

- Yes—Specifies that an IP address is allocated from the default pool and passed to the RADIUS server during RADIUS authentication. This address may be assigned to the dial-in user for the duration of the connection.

- No—Specifies that an IP address is not allocated. This is the default.

Example: `set auth-pool = yes`

Location: External-Auth > Rad-Auth-Client

See Also: Auth-Boot-Host, Auth-Port

Auth-Port

Description: Specifies the UDP port to use for communication with the external authentication server. The value you specify must match the port specified for use in the server's configuration.

Usage: Specify the UDP destination port to use for authentication. The default UDP port used by the RADIUS daemon is specified in the `/etc/services` file (UNIX).

Example: `set auth-port = 1565`

Location: External-Auth > Rad-Auth-Client

See Also: Auth-Server-N, Rad-Auth-Client

Auth-Protocol

Description: Specifies authentication of messages sent on behalf of this user to or from the Simple Network Management Protocol (SNMP) engine and, if enabled, the type of authentication protocol to be used.

Usage: If this parameter is set to a value other than `no-auth`, the Password parameter must specify the password to be used. Following are the valid values:

- `no-auth` disables authentication for this user.
- `md5-auth` (the default value) enables authentication and specifies that the MD5 protocol must be used.
- `sha-auth` enables authentication and specifies that SHA protocol must be used.

Example: `auth-protocol = md5-auth`

Dependencies: If this parameter is set to a value other than `no-auth`, the Password parameter must specify the password to be used.

Location: SNMPv3-USM-User *name*

See Also: Priv-Protocol

Auth-RADIUS-Compat

Description: Enables or disables Vendor-Specific Attribute (VSA) compatibility mode when the Stinger unit is using RADIUS for authentication and authorization purposes.

Usage: Valid values are as follows:

- `old-ascend`—The Stinger unit does not send the Vendor-Specific attribute to the RADIUS server and does not recognize the Vendor-Specific attribute if the server sends it. This is the default.
- `vendor-specific`—The Stinger unit uses the Vendor-Specific attribute to encapsulate Lucent vendor attributes, and uses the RFC-defined User-Password encryption algorithm as well.

Example: `set auth-radius-compat = vendor-specific`

Location: External-Auth > Rad-Auth-Client

See Also: Acct-RADIUS-Compat, Call-Log-RADIUS-Compat

Auth-Realm-Delimiters

Description: Specifies the characters that delimit a realm from the username.

Usage: Specify up to seven characters in any order. The default is `@\/%`. If you do not specify any characters, the system behaves as though `auth-keep-user-name=change-name`.

Example: `set auth-realm-delimiters = "%"`

Dependencies: The Auth-Realm-Delimiters setting does not apply unless `auth-keep-user-name = keep-realm-name`.

Location: External-Auth > Rad-Auth-Client

See Also: Auth-Keep-User-Name, Auth-Req-Delim-Count, Auth-Req-Strip-Side

Auth-Req-Delim-Count

Description: Specifies the number of delimiters to strip from a username in a RADIUS authentication request.

Usage: Specify a number between zero (0) and 65535.

Example: `set auth-req-delim-count = 2`

Dependencies: You must be sure the delimiters to strip are specified in the Auth-Realm-Delimiters parameter.

Location: External-Auth > Rad-Auth-Client

See Also: Auth-Realm-Delimiters, Auth-Req-Strip-Side

Auth-Req-Strip-Side

Description: Specifies the side from which to strip characters in a username of a Radius authentication request.

Usage: Valid values are as follows:

- `none`—Do not strip characters from a username.
- `left`—Strip characters from the left side of the username.
- `right`—Strip characters from the right side of the username.

Example: `set auth-req-strip-side = left`

Dependencies: Auth-Req-Delim-Count must be greater than zero (0) for this parameter to take effect.

Location: External-Auth > Rad-Auth-Client

See Also: Auth-Realm-Delimiters, Auth-Req-Delim-Count

Auth-Reset-Time

Description: Specifies the authentication-timeout period in seconds, after which the Stinger unit returns to the primary RADIUS authentication server. (The Auth-Server-*N* setting specifies the primary RADIUS authentication server.)

Usage: Specify the number of seconds. The default is 0 (zero), which specifies that the Stinger unit does not return to using the primary RADIUS authentication server.

Example: `set auth-reset-time = 60`

Dependencies: For Auth-Reset-Time to apply, you must specify at least one value for Auth-Server-*N*.

Location: External-Auth > Rad-Auth-Client

See Also: Auth-Server-N, Auth-Timeout, Rad-Auth-Client

Auth-Rsp-Required

Description: Determines how the Stinger unit responds if an authentication request times out after a call has been CLID authenticated.

Usage: Valid values are as follows:

- Yes—Specifies that the Stinger unit drops calls that have passed CLID authentication. This is the default.

- No—Specifies that the Stinger unit allows CLID-authenticated connections even if there is no response form the external server.

Example: `set auth-rsp-required = no`

Dependencies: For Auth-Rsp-Required to apply, CLID authentication must be in use, and CLID-Auth-Mode must be set to Required.

Location: External-Auth > Rad-Auth-Client

See Also: CLID, Rad-Auth-Client

Auth-Send67

Description: Specifies whether the Stinger unit requires Remote Authentication Dial-In User Service (RADIUS) attributes 6 (User-Service) and 7 (Framed-Protocol) in a RADIUS user profile when a user wants to initiate PPP.

Usage: Valid values are as follows:

- Yes—Specifies that if a user wants to initiate PPP, his or her RADIUS profile must include attributes 6 and 7.

- No—Specifies that attributes 6 and 7 need not be present in a RADIUS user profile for a user to initiate PPP. This is the default.

Example: `set auth-send67 = yes`

Location: External-Auth

See Also: Auth-Boot-Host, Auth-Boot-Port, Auth-Client N, Auth-Pool

Auth-Server-*N*

Description: Specifies the IP addresses of up to three external authentication servers. The Stinger unit first tries to connect to server #1. If it receives no response, it tries to connect to server #2. If it still receives no response, it tries server #3. If the Stinger unit connects to a server other than server #1, it continues to use that server until it fails to service requests, even if the first server has come back online.

Usage: Specify an IP address in dotted decimal notation, separating the optional subnet mask value from the address with a forward slash character. The addresses must all point to servers of the same type, as specified by the Auth-Type setting. The default is 0.0.0.0, which indicates that no authentication server exists.

Example: `set auth-server-1 = 10.2.3.4/24`

Location: External-Auth > Rad-Auth-Client

See Also: Auth-Key, Auth-Port, Auth-Src-Port

Auth-Sess-Interval

Description: Specifies the number of seconds between RADIUS authentication reports concerning the number of open sessions.

Usage: Specify a number of seconds from 0 to 65535. The default is 0 (zero), which turns off regular RADIUS open-session reports.

Example: `set auth-sess-interval = 15`

Dependencies: Auth-Sess-Interval applies only if `Auth-Type=RADIUS` or `RADIUS Logout`.

Location: External-Auth > Rad-Auth-Client

See Also: Auth-Type, Rad-Auth-Client

Auth-Session-Key

Description: Specifies whether session-key assignments are enabled.

Usage: Valid values are as follows:
- `Yes`—Specifies that session-key assignments is enabled. This is the default.
- `No`—Specifies that session-key assignments is disabled.

Example: `set auth-session-key  =  no`

Dependencies: If Rad-Serv-Enable is set to No, Auth-Session-Key does not apply.

Location: External-Auth > Rad-Auth-Server

See Also: Rad-Serv-Enable

Auth-Src-Port

Description: Specifies the UDP source port to use for external authentication.

Usage: Specify a value from 0 to 65535. The default is 0 (zero), which specifies that the source port is selected from the nonprivileged port range (1024–2000).

Example: `set auth-src-port = 9000`

Dependencies: The Stinger unit uses the source port number to demultiplex the RADIUS reply packets to the appropriate modules. A separate source port is used for each module. On the Stinger unit, the actual source port is the value of Auth-Src-Port plus the slot number, where the shelf controller has a slot number of 0 (zero). So, if Auth-Src-Port is set to 1000, packets originating from the shelf controller have a source port value of 1000, while packets originating from slot 6 have a source-port value of 1006.

Location: External-Auth > Rad-Auth-Client

See Also: Auth-Key, Auth-Port, Auth-Server-N, Rad-Auth-Client

Auth-Timeout

Description: Specifies the number of seconds between attempts to reach an external authentication server. The Stinger unit waits the specified number of seconds for a response to a RADIUS authentication request. If it does not receive a response within that time, it times out and sends the authentication request to the next authentication server (for example, Auth-Server-2).

Usage: Specify an integer from 1 to 10. The default is 1.

Example: `set auth-timeout = 5`

Dependencies: `If Auth-Type = None`, the Auth-Timeout parameter value does not apply.

Location: External-Auth > Rad-Auth-Client

See Also: Auth-Key, Auth-Server-N, Auth-Type, Rad-Auth-Client

Auth-TS-Secure

Description: Specifies security access to the terminal-server interface when the RADIUS Login-Host value is not specified.

Usage: Valid values are as follows:

- `Yes`—Specifies that the terminal-server must be secure. If the Login-Host is not specified, the Stinger unit drops the call. This is the default.
- `No`—Specifies that if the Login-Host is not specified, the Stinger unit allows the dial-in connection to access the terminal-server interface.

Example: `set auth-ts-secure = yes`

Location: External-Auth > Rad-Auth-Client

See Also: Rad-Auth-Client

Auth-Type

Description: Specifies the type of external authentication server to access for incoming connections.

Usage: Valid values are as follows:

- `none`—Disables the use of an authentication server. This is the default.
- `radius`—Specifies that the Stinger unit accesses a RADIUS server. In a RADIUS query, the Stinger unit provides a user ID and password to the server. If the validation succeeds, the server sends back a complete profile. The profile specifies routing, destination-specific static routes, and usage restrictions for the user. RADIUS supports PAP and CHAP, and terminal-server validation.
- `radius/logout`—Identical to Radius, except that when you select Radius/Logout, the Stinger unit sends a request to the RADIUS server to initiate logout when the session ends.

Example: set auth-type = radius

Dependencies: If Auth-Type is set to a value other than None, you must specify at least one authentication server address.

Location: External-Auth

See Also: Auth-Server-N

Auto-Base-Rate

Description: Specifies the initial rate at which the DSL modems train, in Kilobytes per second.

Usage: Specify one of the following rates:

```
144000
272000  (the default)
400000
528000
784000
1168000
1552000
2320000
```

Example: set Auto-Base-Rate = 272000

Location: SDSL { shelf-*N* slot-*N N*} > Line-Config

See Also: Max-Rate

Auto-Correction-Enable

Description: Specifies whether autocorrections for this module are enabled or disabled.

Usage: Applicable only for line interface modules (LIMs). If set to `No`, the LIM tries to correct problems every few hours automatically. If set to `Yes`, the LIM uses the Interval-Auto-Correction parameter to determine how often to correct itself. The default is `Yes`.

Example: `set auto correction-enable = yes`

Location: System-Integrity > Integrity-Config

See Also: Encapsulation-Protocol, Enable-Continuous-Detection, Ratio-Centralized-Detection

Auto-LIM-Sparing-Config

Description: A subprofile of the Lim-Sparing-Config profile.

Usage: Following is a listing of the Auto-Lim-Sparing-Config subprofile, and the Lim-Sparing subprofile, an array of 16 elements, one per LIM, included within it.

```
admin> list auto-lim-sparing-config
[in LIM-SPARING-CONFIG/{ any-shelf any-slot 0
}:auto-lim-sparing-config (new)]
lim-sparing-config = [ { yes 10 100 3 12 } { yes 10 100 3 12 } { yes 10
100 3 1+

admin> list lim-sparing-config   1
[in LIM-SPARING-CONFIG/{ any-shelf any-slot 0
}:auto-lim-sparing-config:lim-spa+
active = yes
error-averaging-period = 10
error-threshold = 100
up-down-threshold = 3
modem-failure-threshold = 12
```

Auto-Logout

Description: Specifies whether or not to log out the current User profile and go back to default privileges upon loss of Data Transmit Ready (DTR) from the serial port.

Usage: Valid values are as follows:

- `Yes`—Specifies that the Stinger unit automatically logs out the current User profile if DTR is lost on the serial port.
- `No`—Specifies that the current User profile remains logged in.This is the default.

Example: `set auto-logout = yes`

Location: Serial

See Also: Idle-Logout, User (profile)

Auto-Negotiate

Description: Specifies whether to set the auto-negotiation option on the enet3nd-module.

Usage: This option is only valid for the enet3nd-module. Valid values are as follows:

- `Yes`—Specifies that auto-negotiation is enabled.
- `No`—Specifies that auto-negotiation is not enabled. This is the default.

Example: `auto-negotiate = no`

Location: Ethernet

See Also: Media-Speed-Mbit

Auto-Profile

Description: Specifies whether the automatic creation of an accessory profile for ATM termination and ATM circuit is enabled or disabled when the LAN session is established on the IDSL line interface module.

When PPP transparent circuit or Frame Relay circuit encapsulation IS configured for connection profiles assigned to the Stinger IDSL LIM, the accessory profiles for ATM termination and ATM circuit are *automatically* created by the system when the LAN session is established on the interface. The accessory profiles are automatically created with the station name set to the station name of the parent PPP transparent circuit or Frame Relay circuit connect profile with the suffix of "_SYXA" and "_SYXC" added to the end for the accessory ATM termination and ATM circuit profile respectively.

Usage: Valid values are as follows:

- `Yes`—Specifies that automatic profile creation is enabled. This is the default.
- `No`—Specifies that automatic profile creation is disabled.

Example: `Automatic Profile = No`

Dependencies: The ATM Termination profile can be either ATM encapsulation or ATM Frame Relay circuit encapsulation. For automatic profiles, if the parent profile (which is the profile configured for PPP transparent circuit or Frame Relay circuit encapsulation), is modified or deleted, then the accessory profiles are deleted, if they exist.

Note: A convenient way to delete the accessory profiles without deleting the parent profile is to set `auto-profile = no` while the parent profile is active.

Location: Connection

See Also: PPP-Circuit

Auto-Telnet

Description: Specifies that the terminal server interprets an unknown command as the name of a host for a Telnet session.

Usage: Valid values are as follows:

- `Yes`—Specifies that a user can omit the keyword `Telnet` and specify a hostname in order to initiate a Telnet session.
- `No`—Specifies that if a user types only a hostname at the terminal-server prompt, the Stinger unit rejects it as an unknown command. This is the default.

Example: `set auto-telnet = yes`

Dependencies: When terminal services are disabled, the Auto-Telnet parameter value does not apply.

Location: Terminal-Server > Terminal-Mode-Configuration > Telnet-Options

See Also: Telnet,Telnet-Options, Terminal-Mode-Configuration

Auto-Update

Description: Specifies whether the domain name server (DNS) fallback table is updated as a result of a successful DNS lookup.

Usage: Valid values are as follows:

- Yes—Specifies that the fallback table should be updated after a successful DNS lookup.
- `No`—Specifies that the table should not be updated. This is the default.

Example: `set auto-update = yes`

Location: IP-Global > Dns-Local-Table

See Also: Dnstab

Auxiliary-Syslog

Description: The Log profile contains two Auxiliary-Syslog subprofiles. Each Syslog data stream is configured independently.

- All the settings in the Log profile, except the Syslog-Format value, affect the first data stream. The Syslog-Format setting controls the format of all Syslog streams.
- The settings in the Auxiliary-Syslog 1 subprofile affect the second data stream.
- The settings in the Auxiliary-Syslog 2subprofile affect the third data stream.

Usage: With Log as the working profile, use the List command to display the Auxiliary-Syslog subprofile. For example:

```
admin> list auxiliary-syslog 1

[in LOG]
syslog-level = info
[in LOG:auxiliary-syslog[1]]
syslog-enabled = no
```

```
syslog-level = info
host = 0.0.0.0
port = 514
facility = local0
```

To close the Auxiliary-Syslog subprofile and return to a higher context in the profile:

admin> **list ..**

Location: Log

See Also: Facility, Host, Syslog-Level

Avcr-Mt

Description: Specifies the minimum threshold used in the algorithms that determine significant change for available cell rate (AvCR) parameters.

Usage: Must be expressed as a percentage.

Example: set avcr-mt = 3

Location: PNNI-Node-Config > Node-timer

See Also: Hello-Holddown, Hello-Inactivity-Factor, Hello-Interval, Hlink-Inact, PTSE-Holddown, PTSE-Refresh-Interval, PTSE-Lifetime-Factor

Avcr-Pm

Description: Available cell rate (AvCR) specifications use a proportional multiplier. The Avcr parameter specifies the proportional multiplier used in the algorithms that determine significant change for available cell rate (AvCR) parameters, for example, increase by 50 percent, or decrease by 50 percent.

Usage: The value is a percentage.

Example: set avcr-pm = 50

Location: PNNI-Node-Config *N* > Node-timer

See Also: Hello-Holddown, Hello-Inactivity-Factor, Hello-Interval, Hlink-Inact, PTSE-Holddown, PTSE-Refresh-Interval, PTSE-Lifetime-Factor

B

Background-Noise-Filter

Description: Specifies the type of filter to use for background noise tests.

Usage: Valid values are

- `PSD`—Power spectral density measurement for 22KHz to 1.6Mhz range.
- `E`—Reports one noise value at 135-ohm impedance for 1KHz to 50kHz range. Used for ISDN qualification.
- `F`—Reports one value for 5KHz to 245KHz range. Used for HDSL qualification.
- `G`—Reports one noise value at 100-ohm impedance for 20KHz to 1.1 MHz range. Used for ADSL qualification.

Example: `set background-noise-filter = psd`

Location: Clt-Command

See Also: Background-Noise-Termination

Background-Noise-Termination

Description: Sets the receiver termination for the background noise test in a copper loop test (CLT).

Usage: Valid values are

- `term100`—Places a 100-ohm termination on the received signal.
- `term135`—Places a 135-ohm termination on the received signal.
- `bridge100`—Puts receiver in high impedance mode, calculates noise signal based on 100-ohm impedance.
- `bridge135`—Puts receiver in high impedance mode, calculates noise signal based on 135-ohm impedance.

Example: `set background-noise-termination = bridge135`

Location: Clt-Command

See Also: Background-Noise-Filter, CLTcmd

Backup

Description: Specifies the name of a backup Connection profile for a dedicated (nailed-up) connection. The profile serves as a backup if the remote device goes out of service. It is not intended to provide alternative lines for getting to a single destination.

When the system detects that the primary interface is unavailable, it puts the primary interface in a Backup Active state. *It does not remove the routes to the primary interface*. It then diverts traffic from the primary to the backup interface. When the system detects that the primary interface is available again, it diverts traffic back to the primary interface. If the backup interface is a switched connection, the Stinger unit then breaks the connection.

Usage: Specify the name of a Connection profile. You can enter up to 32 characters. The default is null.

Example: `set backup = newyork`

Dependencies: Consider the following:

- One of the side effects of the datalink-layer backup interface is that, when a dedicated (nailed-up) interface specifies a backup interface, the routes to the dedicated (nailed-up) interface never go down.

- Nested backups are not supported. (The profile for a backup interface cannot specify another backup interface.)

- The profile for a backup interface does not inherit attributes from the profile for the primary dedicated (nailed-up) connection.

Location: Connection *station* > Session-Options

See Also: Session-Options

Bandwidth

Description: Specifies the shaped bandwidth in kilobits per second.

Usage: Range is 8000 to 155520 kilobits per second.

Example: `set bandwidth = 9000`

Location: Controller-Static-Config > ATM-Parameters > Outgoing-Shaper

Bandwidth-Config *N*

Description: A subprofile that enables you to allocate bandwidth for ATM connections.

Usage: With ATM-Config as the working profile, use the List command to display the Bandwidth-Config subprofile. For example:

```
admin> list bandwidth-config 1
[in ATM-CONFIG:bandwidth-config[1]
allow-max-up-stream-bandwidth=70000
allow-guaranteed-up-stream-bandwidth=44000
```

To close the Bandwidth-Config *N* subprofile and return to a higher context in the profile:

```
admin> list ..
```

Location: ATM-Config > Bandwidth-Config

See Also: Allow-Guaranteed-Up-Stream-Bandwidth, Allow-Max-Up-Stream-Bandwidth

Bandwidth-Monitor-Direction

Description: Specifies the direction for monitoring link utilization. A unit can monitor transmit, transmit and receive, or turn off monitoring entirely.

Usage: Valid values are as follows:

- `transmit`—monitor the transmit direction only
- `transmit-recv`—monitor both the transmit and receive directions
- `none`—turn off link utilization monitoring

Example: `set bandwidth-monitor-direction = transmit`

Location: Answer-Defaults > Mp-Answer

See Also: Add-Persistence,Decrement-Channel-Count, Increment-Channel-Count, Summarize-RIP-Routes

Bandwidth-Stats (profile)

Description: A profile that provides information about bandwidth allocation for a line interface module (LIM).

Usage: Use the Read and List commands to make Bandwidth-Stats the working profile and list its contents. For example:

```
admin> read bandwidth-stats
BANDWIDTH-STATS read

admin> list
[in BANDWIDTH-STATS]
max-upstream-bandwidth=622160
active-upstream-bandwidth-on-trunks=155540
standby-upstream-bandwidth-on-trunks=466620
```

To close the profile and save your changes:

```
admin> write
BANDWIDTH-STATS written
```

Banner

Description: Specifies the terminal-server login banner.

Usage: Specify the banner text. You can enter up to 84 alphanumeric characters. Enclose in double quotation marks.

Example: `set banner = "Welcome"`

Dependencies: If terminal services are disabled, Banner does not apply.

Location: Terminal-Server > Terminal-Mode-Configuration

See Also: Host-N, Remote-Configuration, Terminal-Mode-Configuration, Text-N (N=1–4)

Banner *N*

Description: Indicates the menu banners for terminal-server logins in menu mode, downloaded from RADIUS.

Usage: This setting is read-only.

Example: banner [1] = "Welcome to the Terminal Server"

Location: Ext-Tsrv

See Also: Hosts-Info N, Init-Banner N

Base (profile)

Description: A read-only profile that displays the software version, enabled features, network interfaces, and other system information.

Usage: Use the Get command to display the Base profile values. For example:

```
admin> get base
[in BASE]
software-version=1
software-revision=0
software-level=E
d-channel-enabled=yes
aim-enabled=yes
switched-enabled=yes
multi-rate-enabled=yes
maxlink-client-enabled=enabled
data-call-enabled=yes
r2-signaling-enabled=no
serial-number=6201734
countries-enabled=511
network-management-enabled=no
advanced-agent-enabled=no
phs-support=no
selectools-enabled=no
hardware-level=0
voip-enabled=no
```

Base-Channel-Count

Description: Specifies the number of channels to be used for the call when the session is initially set up, provided that it is a fixed session.

Usage: Specify a number between zero (0) and 65535.

Example: set base channel count = 25

Location: Connection > Mp-Options

See Also: ATM-Options, Minimum-Channels

Base-Config

Description: A subprofile of the ATM-Config profile.

Usage:
```
admin> list base-config
[in ATM-IF-CONFIG/{ { shelf-1 slot-10 0 } 4 }:base-config (new)]
max-vpcs = 255
max-vccs = 8192
max-active-vpi-bits = 8
max-active-vci-bits = 13
ilmi-vpi = 0
ilmi-vci = 0
neighbor-ip-address = 0.0.0.0
neighbor-name = ""
subsc-atm-address =
39:84:0f:80:01:bc:72:00:01:1a:dd:98:00:00:00:00:00:00:00:00
```

Ber-Receive

Description: Indicates whether the bit error rate threshold has been reached or not.

Usage: Read-only display. True indicates that the bit error rate threshold has been reached. False indicates that it has not been reached.

Example: `ber-receive = False`

Location: DS1-ATM- Stat { shelf-*N* slot-*N N*}

See Also: Carrier-Established, Cell-Delineation, IMA-Link-Status, IMA-Link-Statistic, Line-State, Loss-of-Carrier, Loss-of-Sync, Network-Loopback

BERT-Enable

Description: Specifies whether the Bit-Error Rate Test (BERT) is enabled or disabled. In order to check the data integrity of the connection, the BERT counts data errors that occur on each channel. If the two ends of the connection are physically connected, the BERT is run between the two units. If the two ends are not connected, the BERT is run within the module itself. Note that both ends of the connection must enable the BERT.

Note: During a BERT, normal data transmission is interrupted.

Usage: Valid values are as follows:
- `Yes`—Enables the BERT.
- `No`—Disables the BERT. This is the default

Example: `set bert-enable = yes`

Dependencies: Consider the following:
- The BERT-Enable setting is not saved to the unit's permanent memory. If you reset the module or the unit, the setting reverts to its default.
- The BERT-Timer setting determines the duration of the BERT.

Location: line-Diag {shelf-*N* slot-*N N*}

See Also: Accum-Bit-Err, BERT-Error-Counter, BERT-Operation-State, BERT-Timer

BERT-Error-Counter

Description: Indicates the number of errors received during the Bit-Error Rate Test (BERT).

Usage: BERT-Error-Counter is read-only.

Dependencies: You must set BERT-Enable = Yes for BERT-Error-Counter to apply.

Example: `set bert-error-counter = 0`

Location: line-Diag-Stat {shelf-*N* slot-*N N*}

See Also: BERT-Enable, BERT-Operation-State, BERT-Timer

BERT-Operation-State

Description: Indicates the state of the Bit-Error Rate Test (BERT).

Usage: The BERT-Operation-State setting is read-only. It can have one of the following values:

- `waiting-for-511-sync`—The Stinger unit is waiting for CPE before starting the BERT.
- `local-loop-active`—The interface is in local analog loopback and is running the test. No remote device is involved.
- `active`—BERT is running with customer premises equipment (CPE).
- `stopped`—BERT was disabled.
- `loop-back-setup`—The interface is being placed into analog loopback.
- `start-up`—BERT is starting up.

Example: `set bert-operation-state = stopped`

Dependencies: If the two ends of the connection are not connected, the BERT-Operation-State setting does not apply. In this case, you must set BERT-Enabled to `No` to end the BERT.

Location: line-Diag-Stat {shelf-*N* slot-*N N*}

See Also: BERT-Enable, BERT-Error-Counter, BERT-Timer

BERT-Timer

Description: Specifies the duration of the Bit-Error Rate Test (BERT).

Usage: Specify one of the following values:

- 1 minute
- 2 minutes (the default)
- 3 minutes

- 4 minutes

- 5 minutes

- 10 minutes

- 15 minutes

- 20 minutes

- 30 minutes

Example: set bert-timer = 1 minute

Dependencies: Consider the following:

- If the two ends or the connection are not connected, the BERT-Timer does not apply. In this case, you must set BERT-Enabled to No to end the BERT.

- The BERT-Timer setting is not saved to the unit's permanent memory. If you reset the module or the unit, the setting reverts to its default.

Location: line-Diag {shelf-*N* slot-*N N*}

See Also: BERT-Enable, BERT-Error-Counter, BERT-Operation-State

Beta-IMA-Value

Description: Specifies the number of consecutive invalid IMA Control Protocol (ICP) cells to be detected before moving to the IMA HUNT state from the SYNC state.

Usage: Valid numbers range from 1 to 5.

Example: set beta-ima-value = 2

Location: IMAhw-Config { shelf-*N* slot-*N-N* }

See Also: Alpha-Cell-Delin-Value, Alpha-IMA-Value, Gamma-IMA-Value.

Bi-Directional-Auth

Description: *Not currently use*d. Specifies whether Challenge Handshake Authentication Protocol (CHAP) authentication must be done at both ends. It can be used only with CHAP or MS-CHAP authentication.

Usage: When this parameter becomes available, you will be able to specify one of the following values:

- none— The authentication is done only in the direction: the called device authenticates the calling one.

- allowed— The bi-directional authentication is allowed but not required. For incoming calls: we always authenticate the peer. The peer may optionally authenticate us. For outgoing calls: the peer may authenticate us. We will authenticate the peer if it allows this option.

- required— The bi-directional authentication is required, which means that the called device authenticates the calling one and the calling device authenticates the called one.

Location: Connection *station* > PPP-Options

Billing-Number

Description: Specifies a telephone number that the Stinger unit uses for billing purposes.

Usage: Specify the billing number provided by the carrier. You can enter up to 24 characters. The default is null.

Example: `set billing-number = 510-555-1972`

Dependencies: Consider the following:

- The Stinger unit uses the value that you specify as a billing suffix or as the calling party number.
- If you specify a value for Billing-Number, there is no guarantee that the phone company sends it to the answering device.

Location: Connection *station* > Telco-Options

See Also: CalledNumber, CLID, Telco-Options

Bit-Swapping

Description: Enables/disables bit swapping for ADSL-DMT.

Usage: Valid values are as follows:

- Yes—Specifies that bit swapping is enabled
- No—Specifies that bit swapping is disabled This is the default.

On the 12 port DMT module and the 48 port G.lite module bit swapping has no effect.

Example: `set bit-swapping = no`

Location: Al-Dmt > Line-Config

See Also: FBM-DBM-Mode, Loopback

BOOTP-Enabled

Description: Specifies whether the Stinger unit uses BOOTP to get settings and check for a new software load.

Usage: Valid values are as follows:

- Yes—Specifies that the Stinger unit is enabled to use BOOTP.
- No—Specifies that the use of BOOTP is disabled. This is the default.

Example: `set bootp-enabled = yes`

Location: IP-Global

See Also: SLIP-BOOTP

BOOTP-Relay

Description: A subprofile containing options for configuring the BOOTP Relay feature.

Usage: With IP-Global as the working profile, list the BOOTP-Relay subprofile. For example:

```
admin> list bootp-relay
[in IP-GLOBAL:bootp-relay]
active=no
bootp-servers=[ 0.0.0.0 0.0.0.0 ]
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: IP-Global

See Also: BOOTP-Servers N

BOOTP-Servers *N*

Description: Specifies the IP address of up to two BOOTP servers. If you specify more than one BOOTP server, the Stinger unit uses the first server until it becomes unavailable. When the Stinger unit starts using the second BOOTP server, it continues to use that server until it becomes unavailable, at which time it switches to using the first server again.

Usage: For each BOOTP-Server setting, specify an IP address in dotted decimal notation. The default is 0.0.0.0.

Example: `set 1 = 12.34.56.78`

Location: IP-Global > BOOTP-Relay

See Also: BOOTP-Relay

Boot-SR-Version

Description: Indicates the version of the current boot-loader.

Usage: The Boot-SR-Version value is read-only. The boot-loader updates the value of this setting with its version at every system reset.

Example: set boot-sr-version = 2.1

Location: System

See Also: System (profile)

Bottom-Status

Description: Specifies the default contents of the bottom-right portion of the status window.

Usage: Valid values are as follows:

• `general-info`—Displays general information and statistics for the system.

- `log-window`—Displayssaved system-event log entries. This is the default.
- `line-status`—Displays the status of the system telephony interfaces.

Example: set bottom-status = general-info

Location: User *name*

See Also: Default-Status, Top-Status

BPV-Error-Count

Description: Indicates the number of bipolar violation (BPV) errors received since the last time the unit was reset. BPV errors might indicate that the line sent consecutive one bits with the same polarity, that three or more consecutive zeroes were sent, or that an incorrect polarity was present.

Usage: The BPV-Error-Count value is read-only.

Example: `bpv-error-count = 0`

Location: DS3-ATM-Stat {shelf-*N* slot-*N N*}

See Also: AIS-Receive, CP-Bit-Error-Count, FEB-Error-Count, F-Bit-Error-Count, Line-State, Loss-of-Frame, Loss-of-Signal

Bridging-Enabled

Description: Enables/disables bridging on this interface.

Usage: Valid values are as follows:
- `Yes`—Specifies that bridging is enabled
- `No`—Specifies that bridging is disabled This is the default.

Example: set bridging-enabled = no

Location: Ethernet

See Also: Bridging-Group

Bridging-Group

Description: Specifies the default bridging group.

Usage: Specify a number between zero (0) and 2147483647. Default is zero (0). Interfaces with the same bridging group can bridge to each other. Set to 0 to disable bridging.

Example: set Bridging-group = 47

Location: Answer-Defaults > PPP-Answer

See Also: Bridging-Enabled

Btap-Start-Length

Description: Specifies the measurement start length (15 - 20000 feet or 5 - 6097 meters) in a copper loop test.

Usage: Specify a number between zero (0) and 65535. Default is zero.

Example: `set Btap-Measure-Length = 50`

Location: Clt-Command

See Also: Btap-Measure-Length, Dmmall-Input-Imp, TDR-Measurement-Length, TDR-Start-Distance

Btap-Measure-Length

Description: Specifies the measurement length (100 - 20000 feet or 32 - 6097 meters) in the copper loop test.

Usage: Specify a number between zero (0) and 65535. Default is zero.

Example: `set Btap-Measure-Length = 100`

Location: Clt-Command

See Also: Dmmall-Input-Imp, TDR-Measurement-Length, TDR-Start-Distance

Buffer-Chars

Description: Specifies whether the Stinger unit buffers input characters in a terminal-server session, or processes each character as you enter it.

Usage: Valid values are as follows:

- `Yes`—Specifies that the Stinger unit buffers input characters. Buffering provides better throughput at a slight increase in latency.This is the default.
- `No`—Specifies that the Stinger unit processes each input character as you enter it.

Example: `set buffer-chars = no`

Dependencies: If terminal services are disabled, Buffer-Chars does not apply.

Location: Terminal-Server > Terminal-Mode-Configuration

See Also: Terminal-Mode-Configuration

C

Call-By-Call

Description: Specifies the call-by-call signaling value.

Usage: Specify a number from 0 to 65535, corresponding to the type of Call-By-Call service in use. The default is 0 (zero), which disables Call-By-Call service.

The following call-by-call services are available if the service provider is AT&T:

- 0—Disable Call-By-Call service
- 1—SDN, including GSDN
- 2—Megacom 800
- 3—Megacom
- 6—ACCUNET Switched Digital Services
- 7—Long distance service, including AT&T World Connect
- 8—International 800–1800
- 16—AT&T MultiQuest

The following virtual private network (VPN) and GVPN call-by-call services are available if the service provider is Sprint:

- 0—Reserved
- 1—Private
- 2—Inwatts
- 3—Outwatts
- 4—FX
- 5—Tie Trunk

The following call-by-call services are available if the service provider is MCI:

- 1—VNET/Vision
- 2—800
- 3—PRISM1, PRISM II, WATS
- 4—900
- 5—DAL

Example: `set call-by-call = 7`

Location: Connection *station* > Telco-Options

See Also: Telco-Options

Called-Number-Type

Description: *Not currently used in the Frame Relay Profile*. Specifies the type of phone number entered in the Connection profile. When the Stinger unit dials an outgoing call, the carrier uses the value of Called-Number-Type in a Connection profile to interpret the dialed phone number.

Usage: Specify one of the following values:

- `Unknown`—The phone number is of an unknown type.
- `International`—Phone numbers outside the U.S.
- `National`—Phone numbers within the U.S. This is the default.
- `Local`—Phone numbers within your Centrex group.
- `Abbrev`—Add-on numbers only.
- `Network-Specific`—The dialed network interprets the phone number. This setting uses TypeOfNumber=3 in the called party's Information Element.

Example: `set called-number-type = international`

Dependencies: Called-Number-Type does not apply to nailed-up connections.

Note: This parameter does not apply when the bandwidth is dedicated for a permanent virtual circuit (PVC) or switched virtual connection (SVC)), or for switched PVC. Instead, the information is taken from the Connection profile.

Location: Connection *station > Frame-Relay*

See Also: Dial-Number

CalledNumber

Description: For called-number authentication, specifies the number the remote end called to establish the connection. In many cases, the number will be the same as the Dial-Number, but without a trunk group or dial prefix.

Usage: Specify the called number. The default is null.

Example: `set callednumber = 5551212`

Location: Connection *station*

Call-Filter

Description: Specifies the name of a call filter to apply to a connection. The Stinger unit uses a call filter to determine whether or not a packet should cause the unit to reset the idle timer or place a call. If you apply both a call filter and data filter to a connection, the unit applies the call filter after applying the data filter. Only those packets that the data filter forwards can reach the call filter.

Usage: Specify the filter name. The default is null, which specifies that the Stinger unit does not apply a call filter.

Example: `set call-filter = ignore-bcast`

Dependencies: If all channels of a link are nailed up, or if the Filter-Name setting does not specify a call filter, Call-Filter does not apply.

Location: Answer-Defaults > Session-Info, Connection station > Session-Options

See Also: Data-Filter, Filter-Name, Filter-Persistence, Idle-Timer, Session-Info, Session-Options

Calling-Integrity-Time

Description: *Not currently used.* Specifies the Nnumber of seconds the node waits for an SVCC it has initiated to become fully established before giving up and tearing it down.

Location: PNNI-NODE-CONFIG *N* > Node-Svcc-Rcc

Call-info (profile)

Description: a read-only profile that provides active call information.

Usage: Following is a listing of a call-info profile with its included subprofile listings.

```
techpubs> list
[in CALL-INFO/{ 38 }]
mbid* = { 38 }
call-service = nailed-up
called-number-type = 2
nailed-up-group = 801
call-by-call = 0
phone-number = ""
transit-number = ""
billing-number = ""
switched-call-type = 2
ft1-caller = 0
calling-number = { "" unknown unknown unspecified unspecified }
force-56kbps = 0
redirect-number = ""
call-direction = 1
techpubs> list calling-number
[in CALL-INFO/{ 38 }:calling-number]
calling-number = ""
type-of-number = unknown
numbering-plan = unknown
presentation = unspecified
screening = unspecified
```

Call-Info

Description: Specifies whether, at the time an authenticated call ends, the Stinger unit reports to Syslog the following information about the call:

• Station name

• Calling phone number

- Called phone number

- Encapsulation protocol

- Data rate (in bits per second)

- Progress code or disconnect reason

- Number of seconds before authentication

- Number of bytes or packets received during authentication

- Number of bytes or packets sent during authentication

- Length of session (in seconds)

- Number of bytes or packets received during the session

- Number of bytes or packets sent during the session

A one-line Syslog message contains information about the terminated call. The information also appears in the connection status window and is logged as a message at level INFO. For example:

```
"Conn=("cjones-p50" 5106785291->? MP 56000 60/185) \
Auth=(3 347/12 332/13) \
Sess=(1 643/18 644/19), Terminated"
```

If some of the information is not available, that field is displayed as either a question-mark (for strings) or a zero (for numerals).

Usage: To specify that the Stinger unit reports the information to Syslog, specify end-of-call. To specify that the Stinger unit does not report the information, specify none (the default).

Dependencies: Use Call-Info only for diagnosing session problems. The reports to Syslog rely on the UDP protocol, which does not guarantee delivery. Therefore, you should not use Call-Info for billing purposes.

Location: Log

See Also: Facility, Host, Port, Save-Number

Call-Log-Connection-Packets-Enable

Description: Specifies that call-logging Start and Stop packets are sent when connection comes up or goes down (in contrast to line statistics call logging, which is always enabled).

Usage: Valid values are as follows:

- Yes—Specifies that call-logging Start and Stop packets are sent when connection comes up or goes down.

- No—Specifies that call-logging Start and Stop packets are not sent. This is the default. To optimize operations use the default.

Example: `call-log-connection-packets-enable = no`

Location: Call-Logging > *name*

See Also: Call-Log-Multi-Packet

Call-Log-Dropped-Pkt-Enabled

Description: Specifies whether transmission of a notification is enabled when the system detects a change in the status of call-logging packets.

Usage: Valid values are as follows:

- Yes—Enables transmission of a notification when the system detects a change in the status of call-logging packets. This is the default.

- No—Disables transmission of a notification when the system detects a change in the status of call-logging packets.

Example: `call-log-dropped-pkt-enable = no`

Dependencies: If enabled (the default), the system generates a trap when the value of callLoggingDroppedPacketCount in the call-logging MIB changes. A change from 0 to 1 indicates that packets are being dropped. A change from 1 to 0 indicates that packets are no longer being dropped. SNMP management stations can obtain the value of the variable at any time by using an SNMP Get request.

Location: TRAP > *name*

Call-Log-Enable

Description: Enables or disables call logging.

Usage: Valid values are as follows:

- Yes—Enables call logging.

- No—Disables call logging. This is the default.

Example: `set call-log-enable = yes`

Dependencies: If you set Call-Log-Enable=Yes, you must specify the IP address of at least one call-log host for the Call-Log-Host-*N* setting.

Location: Call-Logging > *name*

See Also: Call-Log-Host-N, Call-Log-ID-Base, Call-Log-Key, Call-Log-Limit-Retry, Call-Log-Port, Call-Log-Reset-Time, Call-Log-Stop-Only, Call-Log-Timeout

Call-Logging (profile)

Description: Configures the Stinger unit to communicate with one or more call-log hosts. Call logging is a RADIUS-accounting based feature for logging call information from the Stinger unit. Its main purpose is to duplicate accounting information for sites that wish to keep accounting records separate from call-logging details used to manage resources or troubleshoot call problems.

Once you have configured call logging, the Stinger unit sends Start session, Stop session, and Failure-to-Start session packets to a call-log host. A call-log host is a local host that supports the RADIUS accounting protocol and is configured properly to communicate with the Stinger unit (for example, a RADIUS accounting server or a host running NavisAccess). The call-log information is sent independently of RADIUS accounting records. If both call logging and RADIUS accounting are in use, the information is sent in parallel.

Usage: Use the Read and List commands to make Call-Logging the working profile and list its contents. For example:

```
admin> read call-logging
CALL-LOGGING read
admin> list
[in CALL-LOGGING]
call-log-enable = no
call-log-host-1 = 0.0.0.0
call-log-host-2 = 0.0.0.0
call-log-host-3 = 0.0.0.0
call-log-port = 1646
call-log-key = ""
call-log-timeout = 1
call-log-id-base = acct-base-10
call-log-reset-time = 0
call-log-stop-only = yes
call-log-limit-retry = 0
call-log-server-index = host-1
call-log-radius-compat = 16-bit-vendor-specific
call-log-multi-packet = no
call-log-stream-period = 15
call-log-connection-packets-enable = no
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
CALL-LOGGING written
```

See Also: Call-Logging (profile), Call-Log-Host-N, Call-Log-ID-Base, Call-Log-Key, Call-Log-Limit-Retry, Call-Log-Port, Call-Log-Reset-Time, Call-Log-Stop-Only, Call-Log-Timeout

Call-Log-Host-*N*

Description: Specifies the IP address of up to three call-logging hosts.

The Stinger unit first tries to connect to host #1. If it receives no response, it tries to connect to host #2. If it still receives no response, it tries host #3. If the Stinger unit connects to a host other than host #1, it continues to use that host until it fails to service requests, even if the first host has come back online.

Usage: Specify an IP address in dotted decimal notation. The default is 0.0.0.0.

Example: set call-log-host-1 = 10.1.2.3

Dependencies: If Call-Log-Enable=No, Call-Log-Host-*N* does not apply.

Location: Call-Logging

See Also: Call-Logging (profile), Call-Log-ID-Base, Call-Log-Key, Call-Log-Limit-Retry, Call-Log-Port, Call-Log-Reset-Time, Call-Log-Stop-Only, Call-Log-Timeout

Call-Log-ID-Base

Description: Specifies whether the Stinger unit presents a session ID to the call-log host in base 10 or base 16.

Usage: Valid values are as follows:

- `acct-base-10`—Specifies a decimal base. This is the default.
- `acct-base-16`—Specifies a hexadecimal base.

Example: set call-log-id-base = acct-base-16

Dependencies: Consider the following:

- If Call-Log-Enable=No, Call-Log-ID-Base does not apply.
- Changing the value of Call-Log-ID-Base while call-logging sessions are active results in inconsistent reporting between the Start and Stop records.

Location: Call-Logging

See Also: Call-Logging (profile), Call-Log-Host-N, Call-Log-Key, Call-Log-Limit-Retry, Call-Log-Port, Call-Log-Reset-Time, Call-Log-Stop-Only, Call-Log-Timeout

Call-Log-Key

Description: Specifies a shared secret that enables the call-logging host to recognize data from the Stinger unit. A shared secret acts as a password between the Stinger unit and the call-log host.

Usage: Specify the text of the shared secret. The value you specify must match the value configured on the call-logging host. The default is null.

Example: set call-log-key = mypw

Dependencies: If Call-Log-Enable=No, Call-Log-Key does not apply.

Location: Call-Logging

See Also: Call-Logging (profile), Call-Log-Host-N, Call-Log-Key, Call-Log-Limit-Retry, Call-Log-Port, Call-Log-Reset-Time, Call-Log-Stop-Only, Call-Log-Timeout

Call-Log-Limit-Retry

Description: Specifies the maximum number of retries for call-logging packets.

When the Stinger unit is configured for call logging, it sends Start and Stop packets to the call-log host to record connections. If the host does not acknowledge a packet within the number of seconds you specify for Call-Log-Timeout, the Stinger unit tries again, resending the packet until the host responds, or dropping the packet if the queue of packets to be re-sent is full. You can limit the number of retries by setting a maximum.

Usage: To set the maximum number of retries for Start and Stop packets, set Call-Log-Limit-Retry to a value greater than 0 (zero). A value of 0 (the default) indicates an unlimited number of retries.

Example: set call-log-limit-retry = 10

Dependencies: The Stinger unit always makes at least one attempt before this parameter setting goes into effect. For example, if you set the number of retries to 10, the Stinger unit makes 11 attempts: the original attempt plus 10 retries.

Location: Call-Logging

See Also: Call-Logging (profile), Call-Log-Host-N, Call-Log-ID-Base, Call-Log-Key, Call-Log-Port, Call-Log-Reset-Time, Call-Log-Stop-Only, Call-Log-Timeout

Call-Log-Multi-Packet

Description: Enable/disable the Stinger unit to deliver multiple requests in a single call-logging packet to a call-logging host that supports the Lucent 16-bit vendor specific attributes. Enabling this feature optimizes the transfer of call-logging data to the network management station.

Usage: Valid values are as follows:

*   Yes—Specifies that multiple all-logging requests are sent in a single packet.
*   No—Specifies that multiple all-logging requests are not sent in a single packet.

Dependencies: This parameter can be enabled only if the call-log-radius-compat parameter is set to the value 16-bit-vendor-specific.

Example: set call-log-multi-packet = no

Location: Call-Logging

See Also: Call-Log-Port

Call-Log-Port

Description: Specifies the UDP destination port to use for call-logging requests.

Usage: Specify a UDP port number from 1 to 32767. The value must match the port number configured on the call-log host. The default of 0 (zero) indicates any UDP port.

Example: set call-log-port = 1500

Dependencies: If Call-Log-Enable is set to No in the Call-Logging profile, Call-Log-Port does not apply.

Location: Call-Logging

See Also: Call-Logging (profile), Call-Log-Host-N, Call-Log-ID-Base, Call-Log-Key, Call-Log-Limit-Retry, Call-Log-Port, Call-Log-Reset-Time, Call-Log-Stop-Only, Call-Log-Timeout

Call-Log-RADIUS-Compat

Description: Specifies vendor-specific attribute (VSA) compatibility mode when the Stinger unit is using RADIUS for call-logging to NavisAccess.

Usage: Valid values are as follows:

- `old-ascend`—Specifies that the Stinger unit does not send the Vendor-Specific attribute to the RADIUS server and does not recognize the Vendor-Specific attribute if the server sends it. This is the default.
- `vendor-specific`—Specifies that the Stinger unit uses the Vendor-Specific attribute to encapsulate Lucent vendor attributes, and uses the RFC-defined User-Password encryption algorithm as well.

Example: `set call-log-radius-compat = vendor-specific`

Location: Call-Logging

See Also: Acct-RADIUS-Compat, Auth-RADIUS-Compat

Call-Log-Reset-Time

Description: Specifies the number of seconds that must elapse before the Stinger unit returns to using the primary call-log host (Call-Log-Host-1).

Usage: Specify the number of seconds. The default is 0 (zero), which specifies that the Stinger unit does not return to using the primary call-log host.

Example: `set call-log-reset-time = 60`

Dependencies: For Call-Log-Reset-Time to apply, you must set Call-Log-Enable=Yes in the Cal- Logging profile and specify at least one value for Call-Log-Host-*N* in the same profile.

Location: Call-Logging

See Also: Call-Logging (profile), Call-Log-Host-N, Call-Log-ID-Base, Call-Log-Key, Call-Log-Limit-Retry, Call-Log-Port, Call-Log-Stop-Only, Call-Log-Timeout

Call-Log-Server-Index

Description: Specifies which of the configured `call-log-host-`*N* parameter settings are used as the active call-logging server.

Usage: Valid values are

- `host-1` (the default)
- `host-2`
- `host-3`

If the Stinger unit cannot authenticate the specified server, it attempts to use the next configured server.

Example: `set call-log-server-index = host-1`

Location: Call-Logging

See Also: Call-Logging (profile), Call-Log-Host-N, Call-Log-ID-Base, Call-Log-Key, Call-Log-Limit-Retry, Call-Log-Port, Call-Log-Reset-Time, Call-Log-Stop-Only, Call-Log-Timeout

Call-Log-Stop-Only

Description: Specifies whether the Stinger unit should send a Stop packet that does not contain a user name. (At times, the Stinger unit can send a Stop packet to the call-log host without having sent a Start packet. Such a Stop packet has no user name.)

Usage: Valid values are as follows:

- Yes—Specifies that the Stinger unit should send a Stop packet even if it does not contain a user name. This is the default.
- No—Specifies that the Stinger unit should not send a Stop packet that does not contain a user name.

Example: set call-log-stop-only = no

Location: Call-Logging

See Also: Call-Logging (profile), Call-Log-Host-N, Call-Log-ID-Base, Call-Log-Key, Call-Log-Limit-Retry, Call-Log-Port, Call-Log-Reset-Time, Call-Log-Timeout

Call-Log-Stream-Period

Description: Specifies the number of minutes between snapshots for stream packets.

Usage: You must leave the setting for this parameter at its default value of 15.

Example: set call-log-stream-period = 15

Location: Call-Logging

See Also: Call-Log-Connection-Packets-Enable

Call-Log-Timeout

Description: Specifies the amount of time (in seconds) that the Stinger unit waits for a response to a call-logging request. If it does not receive a response within the specified time, the Stinger unit sends the request to the next host specified by Call-Log-Host-*N*. If all call-logging hosts are busy, the Stinger unit stores the request and tries again at a later time. It can queue up to 154 requests.

Usage: Specify an integer from 1 to 10. The default is 0 (zero), which disables the timer.

Example: set call-log-timeout = 5

Dependencies: If Call-Log-Enable=No, Call-Log-Timeout does not apply.

Location: Call-Logging

See Also: Call-Logging (profile), Call-Log-Host-N, Call-Log-ID-Base, Call-Log-Key, Call-Log-Limit-Retry, Call-Log-Port, Call-Log-Reset-Time, Call-Log-Stop-Only

Call-Route (profile)

Description: A profile that the Stinger unit uses to control the routing of incoming and outgoing calls. Every possible destination within a system has one or more profiles of this type.

Usage: Use the Read and List commands to make a Call-Route profile the working profile and list its contents. Following is an example profile listing with listing of the included subprofiles.

```
techpubs> read call-route { { { shelf-1 any-slot 0 } 0 } 0 }
CALL-ROUTE/{ { { shelf-1 any-slot 0 } 0 } 0 } read
techpubs> list
[in CALL-ROUTE/{ { { shelf-1 any-slot 0 } 0 } 0 }]
index* = { { { shelf-1 any-slot 0 } 0 } 0 }
trunk-group = 0
phone-number = ""
preferred-source = { { any-shelf any-slot 0 } 0 }
call-route-type = any-call-type
techpubs> list index 1
[in CALL-ROUTE/{ { { shelf-1 any-slot 0 } 0 } 0 }:index:device-address]
physical-address = { shelf-1 any-slot 0 }
logical-item = 0
[in CALL-ROUTE/{ { { shelf-1 any-slot 0 } 0 } 0 }:index]
device-address = { { shelf-1 any-slot 0 } 0 }
entry-number = 0
techpubs> list preferred source
[in CALL-ROUTE/{ { { shelf-1 any-slot 0 } 0 } 0 }:preferred-source]
physical-address = { any-shelf any-slot 0 }
logical-item = 0
```

Call-Route-Info

Description: *Not Currently used.* The current default setting indicates the Preferred-Source setting in a Call-Route profile. Any call received on the specified T1 channel is routed to the index address.

The preferred method of call routing is to use the Call-Route profile. However, although Call-Route-Info is deprecated, any non-default setting you specify for it takes precedence over a Preferred-Source specification in a Call-Route profile.

Usage: When this parameter becomes available you will specify a device address within the Stinger unit. You will be able to set Call-Route-Info in any profile or subprofile listed in the location information below. The default indicates any device and passes the responsibility for call routing to Call-Route profiles. Lucent recommends that you accept the default.

Example: `set call-route-info = { 1 6 48 }`

Location: DS3-ATM > Line-Config, E1 {shelf-*N* slot-*N N*} > Line-Interface > Channel-Config *N,* SWAN *{*shelf-*N* slot-*N N}* > Line-Config, T1 {shelf-*N* slot-*N N*} > Line-Interface > Channel-Config *N*

See Also: Call-Route (profile), Channel-Config N, Line-Config, Preferred-Source

Call-Route-Type

Description: Specifies the type of call that the Stinger unit can route to a host device.

Usage: Valid values are as follows:

- `any-call-type`—Specifies that the Stinger unit can route any type of call to a host device. This is the default.

- `voice-call-type`—Specifies that the Stinger unit can route voice bearer calls, excluding 3.1Khz audio, to a host device.

- `digital-call-type`—Specifies that the Stinger unit can route general digital calls, including 3.1Khz audio bearer channel calls, to a host device. As far as the Stinger unit is concerned, 3.1Khz audio calls are voice-bearer. The Stinger unit routes them to a modem, not a High-Level Data Link Control (HDLC) controller.

- `trunk-call-type`—Specifies that the Stinger unit routes calls to a trunk device. Applies to trunk calls.

- `voip-call-type`—Specifies that the Stinger unit treats incoming calls as voice calls coming from the Public Switched Telephone Network (PSTN) for routing across a packet network bridge to another PSTN.

- `phs-call-type`—Specifies Personal Handyphone calls.

- `v110-call-type`—Specifies digital calls recognized as containing V.110 rate-adapted bearer channels.

Example: `set call-route-type = trunk-call-type`

Dependencies: Consider the following:

- The VoIP-call-type setting is supported only when VoIP-Enabled is set to Yes.

- When a Voice over IP (VoIP) license has been enabled, the system creates a new Call-Route profile for each installed MultiDSP module that supports VoIP. The new Call-Route profile sets the Call-Route-Type value to VoIP-Call-Type. The VoIP-Call-Type setting enables the system to route VoIP calls to the MultiDSP module. When the unit receives a VoIP call on a network line, it routes the traffic internally on its Time-Division Multiplexing (TDM) bus to the MultiDSP module, which handles VoIP-related functions such as audio coder/decoder (codec) processing, Real-Time Transport Protocol (RTP) processing, and UDP processing.

Location: Call-Route {{{shelf-N slot-N N} N} N}

See Also: Call-Route (profile), Index, Phone-Number, Preferred-Source, Trunk-Group

Call-Routing-Sort-Method

Description: Specifies whether to use the old slot-first call-routing sort method or the new item-first sort method for analog calls.

When the system resets, the Stinger unit creates the call-routing database by sorting the list of all installed devices. During active use, the Stinger unit resorts the list on the basis of system activity, but the initial sort order determines the initial order in which the unit uses host modules.

In previous software releases, the order in which the Stinger unit used to sort device addresses caused all channels of a host module to be grouped together, forcing a single module to be completely full before the unit started using another module.

The old sort-order default processed the components of device addresses in the following order:

```
shelf slot item logical-item
```

The current sort-order default provides load balancing across modules by ordering device-address components in the following manner:

```
item shelf slot logical-item
```

This sort order causes the channels of different modules to be interspersed, resulting in load balancing across all modules, even after a system reset.

Usage: Valid values are as follows:

Usage: Specify one of the following values:

*   `item-first`—Specifies that the Stinger unit sorts by item number, then shelf, and then slot number. This setting tends to distribute incoming calls evenly across multiple host modules. This is the default.

*   `slot-first`—Specifies that the Stinger unit sorts by shelf and slot number, and then by item number. This setting tends to concentrate incoming calls on one host module at a time.

Example: `set call-routing-sort-method = slot-first`

Location: System

See Also: Call-Route (profile), Call-Route-Info, Call-Route-Type

Call-Type

Description: Specifies dedicated channel usage for a connection.

Usage: Valid values are as follows:

*   `off`—Specifies that the connection does not use any dedicated (nailed-up) channels. This is the default.

*   `ft1`—Specifies that the connection uses only dedicated channels.

*   `ft1-mpp`—Specifies that the Stinger unit might augment dedicated channels with switched channels for increased bandwidth during a Multilink Protocol Plus (MP+) call.

*   `ft1-bo`—Specifies that a nailed-up connection can use switched channels, both for additional bandwidth and for a backup method of reaching the site if the dedicated connection is down.

Example: `set call-type = ft1`

Location: Connection station > Telco-Options

See Also: Billing-Number, Call-By-Call, Nailed-Up-Group

Card-Code (profile)

Description: This read-only profile displays the enabled features on a module.

Usage: Use the dir, read, and list commands to make card-code the current profile, as in the following example:

```
techpubs> dir card-code
0  10/31/2000 18:08:59  { shelf-1 slot-1 0 }
techpubs> read card-code { shelf-1 slot-1 0 }
CARD-CODE/{ shelf-1 slot-1 0 } read
techpubs> list
[in CARD-CODE/{ shelf-1 slot-1 0 }]
physical-address* = { shelf-1 slot-1 0 }
network-management = 0
nm-provisioning = 0
nm-copper-loop-test = 0
nm-vpn = 0
nm-radius = 0
nm-reporting = 0
```

Carrier-Established

Description: Indicates whether there are no error conditions on the physical line connection.

Usage: Valid values for this read-only parameter are as follows:

- true—indicates there are no error conditions.
- false—indicates there are error conditions.

Example: carrier-established = False

Location: DS1-ATM- Stat { shelf-*N* slot-*N N*}

See Also: Ber-Receive, Cell-Delineation, IMA-Link-Status, Line-State, Loss-of-Carrier

Cast-Type

Description: Specifies the connection profile topology type.

Usage: With the current software version, only the default point-to-point (p2p) value is valid.

Example: cast-type = p2p

Location: Connection

CBR

Description: Specifies whether constant bit rate (CBR) traffic is enabled or disabled in this queue.

Usage: Valid values are as follows:

- Yes—Indicates the queue supports CBR traffic. This is the default.
- No—Indicates the queue does not support CBR traffic.

For each queue, one or more Asynchronous Transfer Mode (ATM) services categories can be set to yes. CBR must be set to yes for at least one and no more than two of the active queues assigned to a line interface module (LIM), control module, or trunk.

Example: `set cbr = no`

Location: Controller-Static-Config < ATM-Parameters > outgoing-queue

See Also: UBR

Cdv-Pm

Description: Specifies a proportional multiplier (a percentage) used to determine significant change for the cell delay variation (CDV) metrics. CDV is a component of cell transfer delay (see Ctd-Pm), induced by buffering and cell scheduling and is associated with CBR and VBR quality of service (QoS).

Usage: Specify a percentage.

Example: `set cdv-pm = 25`

Location: PNNI-Node-Config *N* > Node-timer

See Also: Avcr-Pm, Ctd-Pm, Hello-Holddown, Hello-Inactivity-Factor, Hello-Interval, Hlink-Inact, PTSE-Holddown, PTSE-Refresh-Interval, PTSE-Lifetime-Factor

Cell-Delay-Variation-Tolerance

Description: Specifies the cell delay variation tolerance (CDVT) in microseconds.

Usage: This setting is related to the *jitter* tolerance of the application. The ideal delay variation is zero for an application such as voice. A default of 20 microseconds is a reasonable jitter threshold for most applications with a low tolerance for delay, for example, constant bit rate (CBR) and real-time variable bit rate (VBR) traffic applications. A higher value could be used for nonreal-time VBR and other applications that are not delay sensitive. The range is 0 to 1500 microseconds.

Example: `set Cell-Delay-Variation-Tolerance = 50`

Dependencies: This setting is related to the *jitter* tolerance of the application.

Location: ATM-QOS

See Also: Ignore-Cell-Delay-Variation-Tolerance, Ignore-Max-Burst-Size, Max-Burst-Size, Peak-Cell-Rate-Cells-Per-Sec, Sustainable-Cell-Rate-Cells-Per-Sec, Sustainable-Rate-Kbits-Per-Sec

Cell-Delineation

Description: Indicates that ATM cell delineation (cell transfer below specified HEC level) has been reached.

Usage: Valid values for this read-only display are as follows:

• `true`—Indicates cell-delineation has been reached.

• `false`—Indicates cell-delineation has not been reached.

Example: `cell-delineation = False`

Location: DS1-ATM- Stat { shelf-*N* slot-*N N*}

See Also: Ber-Receive, Carrier-Established, IMA-Link-Statistic, IMA-Link-Status,

Cell-Level

Description: Specifies the modem cellular-communications transmit and receive level.

Usage: Valid values are as follows:

• `-18-db-cell-level`—This is the default.

• `-17-db-cell-level`

• `-16-db-cell-level`

• `-15-db-cell-level`

• `-14-db-cell-level`

• `-13-db-cell-level`

• `-12-db-cell-level`

• `-11-db-cell-level`

• `-10-db-cell-level`

Example: set cell-level = -17-db-cell-level

Dependencies: If terminal services are disabled, Cell-Level does not apply.

Location: Terminal-Server > Modem-Configuration

See Also: Cell-Mode-First, Modem-Configuration

Cell-Mode-First

Description: Specifies whether the Stinger unit attempts a cellular connection before a land-based connection.

Usage: Valid values are as follows:

• `Yes`—Specifies that the Stinger unit attempts a cellular connection first.

• `No`—Specifies that the Stinger unit attempts a land-based connection before attempting a cellular connection. This is the default.

Example: set cell-mode-first = no

Dependencies: If terminal services are disabled, Cell-Mode-First does not apply.

Location: Terminal-Server > Modem-Configuration

See Also: Cell-Level, Modem-Configuration

Cell-Payload-Scramble

Description: Specifies whether cell payload scrambling in Asynchronous Transfer Mode (ATM) cells is enabled.

Usage: Valid values are as follows:

- Yes—Enables cell payload scrambling. This is the default.
- No—Disables cell payload scrambling

Example: `set cell-payload-scramble = no`

Location: DS3-ATM

See Also: Cell-Level, Cell-Delay-Variation-Tolerance

Channel-Config *N*

Description: A subprofile for configuring each logical link associated with an IDSL line.

Usage: Use the Dir, Read, and List commands to make IDSL the current profile, and then list Channel-Config *N*

Example:

```
admin> list line-interface
[in IDSL/{ any-shelf any-slot 0 }:line-interface (new)]
admin> lis chann 1
[in IDSL/{ any-shelf any-slot 0
}:line-interface:channel-config[1] (new)]
channel-usage = switched-channel
```

See Also: Call-Route-Info, Channel-Usage, Phone-Number, Route-Port, SPID, Trunk-Group

Channel-State

Description: Indicates the status of the physical connection on the line.

Usage: Valid values for this read-only parameter are as follows:

- disabled—indicates that line is configured as disabled.
- unavailable—line is enabled but no customer premises equipment (CPE) device is connected to the IDSL port.
- nailed-up—indicates that physical connection has been made.

Example: `channel-state = [ disabled disabled ]`

Location: IDSL-Stat { *N N N* }

Channel-Usage

Description: Specifies the usage for a channel in the Channel-Config *N* subprofile of an E1,T1, or IDSL profile.

Usage: For a T1, E1, or ISDN BRI channel, specify one of the following values:

- `unused-channel`—Specifies that the channel is unused. The Stinger unit sends the single idle code defined for the channel.

- `switched-channel`—Specifies a switched channel, which uses either robbed-bit or D-channel signaling. This is the default.

- `nailed-64-channel`—Specifies a clear-channel 64K circuit. It does not require any setup information.

- `d-channel`—Specifies the channel used for ISDN D-Channel signaling, directed at the appropriate controller for the physical interface.

T1 and E1 channels also support the D-Channel setting, which specifies a channel used for ISDN D-channel signaling. For T1, the D channel is channel 24. For E1, it is channel 16.

Only T1 channels support the following additional values:

- `NFAS-Primary-D-Channel`—Specifies the primary D channel for a group of T1 lines with the same Non-facility Associated Signaling (NFAS) ID. You must set all other channels on the NFAS line to Switched-Channel, Nailed-64-Channel, or Unused-Channel. Within an NFAS group, you should configure only one line to provide the primary ISDN D channel.

- `NFAS-Secondary-D-Channel`—Specifies the secondary D channel for a group of T1 lines with the same NFAS ID. You must set all other channels on the NFAS line to Switched-Channel, Nailed-64-Channel, or Unused-Channel. Within an NFAS group, you should configure only one line to provide the secondary (backup) D channel.

Usage: For IDSL valid values are as follows:

- `switched-channel`—*Not currently used.* Specifies a switched channel, which can be either robbed-bit or D-channel, depending on the higher level configuration.

- `nailed-64-channel`—Specifies a a clear-channel 64K circuit. It does not require any setup information.

Example: set channel-usage = switched-channel

Dependencies: Channel usage may be different from the usage specified for the line itself. For example, the line might specify switched usage, while individual channels within that line might specify dedicated usage.

Location: E1 {shelf-*N* slot-*N N*} > Line-Interface > Channel-Config *N,*
IDSL {shelf-*N* slot-*N N*} > Line-Interface > Channel-Config *N,*
T1 {shelf-*N* slot-*N N*} > Line-Interface > Channel-Config *N*

See Also: Channel-Config N, Channel-State, Line-Interface

Check-Far-End-IMA-Id

Description: Specifies whether the verification of the the far-end IMA ID during group start up is enabled or disabled.

Usage: Valid values are as follows:

- Yes—Specifies that this check is enabled.
- No—Specifies that this check is not enabled. This is the default.

Example: check-far-end-ima-id = no

Location: IMAGRoup > *name*

See Also: Expected-Far-End-IMA-Id, Group-Symmetry-Mode, IMA-Id

Circuit-Name

Description: Indicates or specifies, according to the profile that includes it, the name of a circuit.

Usage:

- In an ATMPVC-Stat profile, Circuit-Name is a read-only value for the name of the permanent virtual circuit (PVC).
- In an ATMVCC-Stat profile, Circuit-Name is a read-only value for the name of the Virtual Channel Connection (VCC).
- In the Fr-Options subprofile of a Connection profile, you can specify a name for the peer Frame Relay datalink for a Frame Relay circuit, using up to 14 characters.

  Note: If you are configuring IDSL, and you do not specify Circuit-Name in the Fr-Options subprofile of the Connection profile, the Stinger unit automatically creates a circuit name based on the VPI, VCI, and nailed-group parameters set in the Atm-Connect-Options subprofile.

Location: ATMPVC-Stat *circuit-name*, ATMVCC-Stat *circuit-name,* Connection *station >* Fr-Options

See Also: Current-State, FR-Options

Clear-Call

Description: Specifies whether the Stinger unit clears a dial-in connection when an interactive Telnet, Rlogin, or TCP session terminates.

Usage: Valid values are as follows:

- Yes—S pecifies that the Stinger unit clears a dial-in connection when an interactive Telnet, Rlogin, or TCP session terminates.
- No—Specifies that the Stinger unit does not clear a dial-in connection when an interactive session terminates. Instead, the Stinger unit returns the user to the terminal-server menu. This is the default.

Example: set clear-call = yes

Dependencies: If terminal services are disabled, Clear-Call does not apply.

Location: Terminal-Server > Terminal-Mode-Configuration

See Also: Terminal-Mode-Configuration

Clear-Screen

Description: Specifies whether the Stinger unit clears the screen when a terminal-server session begins.

Usage: Valid values are as follows:

- `Yes`—Specifies that the Stinger unit clears the screen of all status messages and echoed scripts when it establishes a terminal-server session. This is the default.
- `No`—Specifies that the Stinger unit establishes the terminal-server session without clearing the screen.

Example: `set clear-screen = yes`

Dependencies: If terminal services are disabled, Clear-Screen does not apply.

Location: Terminal-Server > Terminal-Mode-Configuration

See Also: Terminal-Mode-Configuration

CLID

Description: Specifies the phone number of the remote station (the calling line ID). If the CLID is present for an incoming call, the Stinger unit can use the CLID value for CLID authentication before answering the call.

Usage: Specify the calling party's phone number. You can enter up to 24 characters. The default is null.

Example: `set clid = 510-555-1213`

Location: Connection *station*

CLID-Auth-Mode

Description: Specifies how the Stinger unit uses the telco-provided Calling-Line ID (CLID) and Dialed Number Information Service (DNIS) called number for authenticating incoming calls.

Usage: Valid values are as follows:

- `ignore`—Specifies that the Stinger unit does not require a matching ID from incoming calls. This is the default.
- `clid-first`—Specifies that if the CLID is sent by the telecommunications company (telecom) switch, the Stinger unit uses it to authenticate the call. If CLID authentication fails for any reason, or if the telco switch does not provide the CLID, the Stinger unit does not drop the call but allows negotiations to proceed to password authentication.

- `clid-prefer`—Specifies that the Stinger unit uses the CLID, if available, to authenticate the call. If the CLID is not provided by the switch, the Stinger unit uses the type of authentication specified by the Send-Auth-Mode setting in the Connection profile. If the CLID is provided by the switch but does not match the calling number specified in a local Connection profile or Remote Authentication Dial-In User Service (RADIUS) user profile, or if the CLID succeeds but the encapsulation protocol's authentication fails, the Stinger unit drops the call.

- `clid-require`—Specifies that the Stinger unit must receive a CLID from the incoming call, and the CLID must match the calling number specified in a local Connection profile or RADIUS user profile. If the Stinger unit does not receive a CLID or does not find a matching number in a profile, the Stinger unit does not answer the call. A matching RADIUS user profile can require name and password authentication after CLID, authentication by setting Ascend-Require-Auth to require-auth.

- `clid-fallback`—Specifies that the Stinger unit must receive a CLID in the incoming call. Otherwise, the Stinger unit does not answer the call. If the CLID matches a calling number specified in a local Connection profile or RADIUS user profile, the Stinger unit authenticates the call with the CLID. If the Stinger unit does not receive a response from the RADIUS server, it uses the authentication configured in the Answer-Defaults profile.

- `dnis-first`—Specifies that if the called number is sent by the telecom switch, the Stinger unit uses it to authenticate the call. If called-number authentication fails for any reason or if the telco switch does not provide the called number, the Stinger unit does not drop the call but allows negotiations to proceed to password authentication.

- `dnis-require`—Specifies that the called number must match the number specified in a local Connection profile or RADIUS user profile. If the Stinger unit does not find a matching number in a profile, the Stinger unit does not answer the call. You can configure a matching RADIUS user profile to require name and password authentication after called-number authentication by setting Ascend-Require-Auth to Require-Auth.

- `DNIS-pref`—Specifies that the Stinger unit uses the called number, if available, to authenticate the call. If the called number is not provided by the switch, the Stinger unit uses the type of authentication specified by the Answer-Defaults profile. If the called number is provided by the switch but does not match the called number specified in a local Connection profile or RADIUS user profile, the Stinger unit drops the call.

Example: `set clid-auth-mode = dnis-pref`

Dependencies: For CLID Callback in a RADIUS user profile, you must set CLID-Auth-Mode to clid-require. For DNIS Callback in a RADIUS user profile, you must set CLID-Auth-Mode to dnis-require.

Location: Answer-Defaults

See Also: CalledNumber, CLID, CLID-Auth-Mode

CLID-Selection

Description: Specifies which Calling-Line ID (CLID) to use for an incoming call. A CLID provided by the Public Switched Telephone Network (PSTN) is considered secure. A CLID provided by the end user is secure only if it has been validated by the PSTN. Other forms of user CLIDs are considered insecure.

Usage: Valid values are as follows:

- `first`—Specifies that the Stinger unit uses the first CLID provided by the PSTN. The CLID could be provided by either the user or the network. This is the default.

- `secure-prefer`—Specifies that the Stinger unit uses a secure CLID if one is available. If no secure CLID is available, an insecure CLID will be used, if present.

- `secure-require`—Specifies that the Stinger unit uses a secure CLID if one is available. If no secure CLID is available, the unit behaves as though no CLID is present.

- `user-prefer`—Specifies that the Stinger unit uses a user-provided CLID if one is available. If no user-provided CLID is available, the unit choose a network CLID, if present.

- `user-require`—Specifies that the Stinger unit uses a user-provided CLID is one is available. If no user-provided CLID is available, the unit behaves as though no CLID is present.

Example: `set clid-selection = secure-prefer`

Location: Answer-Defaults

See Also: CLID

Client-Default-Gateway

Description: Specifies the default gateway to use for traffic from this connection if no specific route appears in the IP routing table.

Usage: Specify an IP address in dotted decimal notation. The default is 0.0.0.0, which causes the system to use the default route.

Example: `set client-default-gateway = 10.207.23.13`

Location: Connection *station* > IP-Options

See Also: Ignore-Def-Route, IP-Options

Clock-Priority

Description: Assigns a clock priority to an interface. When multiple interfaces are eligible to be the clock source for synchronous transmissions, the Stinger unit uses the value you specify to select an interface as the master clock source. If multiple interfaces are eligible to be the clock source and each interface has an equal Clock-Priority value, the Stinger unit chooses a clock source at random.

Usage: Valid values are as follows:

- `high-priority`—Specifies the highest priority. The Stinger unit chooses an interface with this priority setting as the clock source over other interfaces with a lower priority. If more than one interface has the highest priority, the first available interface becomes the clock source.

- `middle-priority`—Specifies the second priority. The Stinger unit chooses an interface with this priority setting if every interface with a high-priority setting is unavailable. If more than one interface has a middle-priority setting, the first available middle-priority interface becomes the clock source. This is the default.

• low-priority—Specifies the lowest priority. The Stinger unit chooses an interface with this priority only if every interface with a higher priority setting is unavailable. If more than one interface has a low-priority setting, the first available low-priority interface becomes the clock source.

Once the Stinger unit chooses an interface as the clock source, it uses that interface until it becomes unavailable, or a until a higher-priority source becomes available.

Example: set clock-priority = middle-priority

Location: DS3-ATM {shelf-*N* trunk-module-*N N*} > Line-Config,
 OC3-ATM {shelf-*N* trunk-module-*N N*} > Line-Config, HDLS2 {shelf-*N* slot-*N N*}

See Also: Clock-Source

Clock-Source

Description: Specifies whether the unit obtains the system clock signal from the port. In an IDSL profile this parameter specifies whether the unit obtains the system clock signal from the IDSL line.

Usage: Valid values are as follows:

• eligible—Specifies that the unit obtains the system clock signal from the port or line. This is the default.

• not-eligible—Specifies that the unit does not obtain the system clock signal from the port or line.

Example: set clock-source = eligible

Location: DS3-ATM {shelf-*N* trunk-module-*N N*} > Line-Config,
OC3-ATM {shelf-N trunk-module-N N} > Line-Config,
HDLS2>{shelf-*N* slot-*N N*}, IDSL/{*N N N* }:line-interface

See Also: Clock-Priority

CLT-Access (profile)

Description: Configures and activates access to the copper loop test.

Usage:

```
Stinger >read clt-access
CLT-ACCESS read

Stinger >list
[in CLT-ACCESS]

cltm-slot = slot-16
access-slot = slot-16
access-port = 1
access-mode = looking-out
access-terminal = internal-tester-terminal
activate-access = no
access-result = idle
```

CLT-Command (profile)

Description: Configures the parameters required to run any of the tests provided by the Copper Loop Test (CLT) module. The Test-Operation parameter defines the test to be performed. Any change to the vbalue of this parameter initiates the test identified by the new value. The Test-Operation Parameter should be set after all the other parameters.

Usage: Following is a sample of this profile

```
Stinger >read clt-command
CLT-COMMAND read
Stinger >list
[in CLT-COMMAND]
cltm-slot = slot-15
test-operation = line-bgns-test
dmm-type = resistance
dmm-lead = tip-ring
background-noise-filter = psd
background-noise-termination = bridge135
loop-resistance-unit = metric
loop-resistance-temp = 0
impulse-noise-start-thresh = 0
impulse-noise-start-delta = 0
impulse-noise-start-max-count = 0
impulse-noise-start-dead-time = 0
impulse-noise-start-timer = 0
calibration-type = insertion-loss
tone-send-freq = 0
tone-send-level = 0
tdr-unit = metric
tdr-gauge = 4
tdr-vp = 90
tdr-avg = 2
tdr-get-type = manual
tdr-start-distance = 6000
tdr-measurement-length = 10000
```

CLTm-Slot

Description: Specifies the slot number where copper loop test (CLT) or path selector module (PSM) is installed.

Usage: Enter the slot number preceded by slot-.

Example: set cltm-slot = slot-15

Location: Clt-Access

See Also: Access-Slot

CLT-Result (profile)

Description: This profile indicates the test result of all the tests the tester module has executed. The test-result-status parameter is set to not-valid at the start of each test, and is updated to valid, or out-of-range at the end of each test. All of the CLT-Result profile is cleared at start of each test, and, depending on the test, the corresponding result parameters are updated at the end of the test.

Usage: Following is an profile with sample settings.

```
ofirStinger >read clt-result

CLT-RESULT read

ofirStinger >list
[in CLT-RESULT]
cltm-slot = slot-15
test-result-status = valid
dmm-result = 0
loop-resistance = 0
loop-resistance-length-1 = 0
loop-resistance-length-2 = 0
loop-resistance-length-3 = 0
coil-detection-coil-count = 0
impulse-noise-read-low-threshold = 0
impulse-noise-read-mid-threshold = 0
impulse-noise-read-high-threshold = 0
rcv-tone-frequency = 0
rcv-tone-level = 0
tdr-sample-count = 0
hardware-revision = 0
software-revision = 0
psd-frequency-level = [ { 4 -7892 } { 9 -3849 } { 13 -3849 } { 17 -3422
} { 22 +
tdr-distance-level = [ { 0 0 } { 0 0 } { 0 0 } { 0 0 } { 0 0 } { 0 0 }
{ 0 0 } +
```

Code-Violations

Description: Indicates the number of HDSL2 cyclic redundancy check (CRC) anomalies occurring during the accumulation period.

Usage: This is a read-only display of statistics to check interface operations.

Example: Code-Violations = 17

Location: HDSL2- Stat { shelf-*N* slot-*N N* } > physical-statistics

See Also: Errored-Second, LOSW-Second, Severely-Errored-Second, Unavailable-Second

Coil-Detection-Coil-Count

Description: Indicates the number of load coils detected during a copper loop test (CLT).

Usage: Read-only value.

Example: Coil-Detection-Coil-Count = 2

Location: Clt-Result

See Also: Loop-Resistance

Coldstart-Enabled

Description: Specifies whether the system generates a notificaton (trap) when the Stinger unit reinitializes itself so that the configuration of the SNMP manager or the system itself might be altered.

Usage: Valid values are as follows:

- Yes—Specifies that the system generates a trap when the Stinger unit reinitializes itself so that the configuration of the SNMP manager or the system itself might be altered. This is the default.
- No—Specifies that the system does not generates a notification (trap) when the Stinger unit reinitializes itself so that the configuration of the SNMP manager or the system itself might be altered.

Example: set coldstart-enabled = no

Location: Trap *host-name*

See Also: Warmstart-Enabled

Community-Minus-1

Description: *Not currently used.* Specifies a number from 0 to 104 representing the highest level of the PNNI hierarchy that lies within the community minus one scope.

Usage: When this parameter becomes available, you will be able to specify a number from one to 104. The default is 64.

Example: community-minus-1 = 64

Location: PNNI-Node-Config *N* > Node-Scope-Mapping

Community-Name

Description: Specifies the SNMP community name associated with SNMP Protocol Data Units (PDUs). The string you specify becomes a password that the Stinger unit sends to the SNMP manager when an SNMP trap event occurs. The password authenticates the sender identified by Host-Address.

Usage: Specify the community name. You can enter up to 31 characters. The default is public.

Example: set community-name = mycomm

Location: Trap *host-name*

See Also: Alarm-Enabled, Host-Name, Host-Name, Port-Enabled, Security-Mode

Community-Plus-1

Description: *Not currently used.* Specifies a number from 0 to 104 representing the highest level of the PNNI hierarchy that lies within the community minus one scope.

Usage: When this parameter becomes available, you will be able to specify a number from one to 104. The default is 48.

Example: community-plus-1 = 48

Location: PNNI-Node-Config *N* > Node-Scope-Mapping

Config-Change-Enabled

Description: Spccifies whether the Simple Network Management Protocol (SNMP) Config-Change notification (Trap 30) is enabled or disabled.

Usage: The trap is enabled by default, which causes the system to issue the trap whenever the system configuration is modified or a new software version is loaded. If the parameter is set to no, the system does not issue the trap for those events.

Usage: Valid values are as follows:

• Yes—Specifies that the trap is enabled. This is the default.

• No—Specifies that the trap is not enabled.

Example: set config-change-enabled = no

Location: Trap *name*

See Also: Event-Overwrite-Enabled

Config-Side

Description: Specifies the role of the managed entity as one side of the Asynchronous Transfer Mode (ATM) interface.

Usage: Valid values are as follows:
•   user—the role of the managed entity is user
•   network—the role of the managed entity is network
•   other—This is the default.

Example: set config-side = other

Dependencies: This value does not apply when the object atmIntfConfigType is set to autoConfig, atmfPnni1Dot0, or atmfBici2Dot0.

Location: ATM-IF-CONFIG { { any-shelf any-slot *N* }*N* } > Extension-Config

See Also: Config-Type

Config-Type

Description: Specifies the type of connection-setup procedures configured for the Asynchronous Transfer Mode (ATM) interface.

Usage: Valid values are as follows:

- `atmf-uni-pvc-only` —This is the default.
- `atmf-pnni1dot0`—enables Private Network-to-Network Interface (PNNI) on trunk interfaces.
- `atmf-nni-pvc-only`—*Not currently used.*

For trunk port interfaces, setting the parameter to atmf-pnni1dot0 enables Private Network-to-Network Interface (PNNI).

Example: `set config-type = atmf-uni-pvc-only`

Location: ATM-IF-CONFIG { { any-shelf any-slot *N* } *N* } > Extension-Config

See Also: Config-Side

Connection (profile)

Description: Configures connection-specific information, including authentication settings, compression values, and telco options.

Usage: Use the Read and List commands to create a new Connection profile and list its contents. For example:

```
admin> read connection newyork
CONNECTION/newyork read

admin> list
[in CONNECTION/newyork]
station*=newyork
active=yes
encapsulation-protocol=atm
called-number-type=national
dial-number=""
clid=""
ip-options={ yes yes 10.122.99.1/24 0.0.0.0/0 7 100 255 no no +
session-options={ "" "" no 120 no-idle 120 "" 0}
telco-options={ ans-and-orig no off 1 no no 56k-restricted 0 +
fr-options={ frlink 16 "" no "" 16 }
usrRad-options={ global 0.0.0.0 1646 "" 1 acct-base-10 }
calledNumber=""
framed-only=no
atm-options={ aal5-llc 0 32 }
atm-connect-options={ aal5-llc 0 32 }
```

Use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
CONNECTION/newyork written
```

See Also: ATM-Connect-Options, ATM-Options, CalledNumber, Called-Number-Type, CLID, Dial-Number, Encapsulation-Protocol, IP-Options, Session-Options, Station, Telco-Options, UsrRad-Options

Conn-Estab-Interval

Description: *Not currently used.* Specifies the number of seconds between successive transmissions of interim local management interface (ILMI) messages on this interface for the purpose of detecting establishment of ILMI connectivity.

Usage: Valid settings are from 1 (the default) to 65535.

Example: `conn-estab-interval = 1`

Location: ATM-If-Config { { any-shelf any-slot *N* } *N* } < Extension-Config

See Also: Config-Side, Config-Type, ILMI-Admin-Status, Loss-Detect-Interval, Poll-Inact-Factor

Conn-Kind

Description: Specifies the kind of soft virtual path connection (SPVC) connection.

Usage: With the current software version, valid values are

- `pvc`—Specifies a virtual link of a permanent virtual circuit (PVC)/permanent virtual path (PVP).This is the default.
- `spvc-initiator`—Specifies a virtual link at the permanent virtual channel (PVC) side of an SPVC (the link interface module (LIM) -side connection to customer premises equipment (CPE)).
- `spvc-target`—Specifies a virtual link at the PVC side of an SPVC where the switch is the target of the SPVC setup
- `svc-incoming`—*Not currently used.* Specifies a virtual link established after reception of signaling request to setup an SVC. User is not allowed to specify this option from CLI. `svc-incoming` is built dynamically.
- `svc-outgoing`—*Not currently used.* Specifies a virtual link established after forwarding or transmission of signaling request to setup an SVC. User is not allowed to specify this option from CLI. `svc-outgoing` is built dynamically.

Example: `set conn-kind = spvc-target`

Location: Connection *station* > ATM-Options

See Also: Conn-User

Conn-User

Description: Specifies whether a soft virtual path connection (SPVC) connection is for a user or for a signaling channel.

Usage: The field is read-only and has one of two values:

- `default`—represents any normal user connection.
- `cpcs`—(common part convergence sublayer) indicates that the profile was created automatically for use by the ATM signaling control channel.

Example: `set conn-user = default`

Location: Connection *station*

See Also: Conn-Kind

Console-Enabled

Description: Indicates whether the system generates a trap when the console has changed state.

Usage: Valid values are as follows:

- `Yes`—Specifies that the system generates a trap when the console has changed state. This is the default.
- `No`—Specifies that the system does not generate a trap when the console has changed state.

Example: set console-enabled = no

Location: Trap *host-name*

See Also: Ascend-Enabled

Contact

Description: Specifies the person or department to contact for reporting error conditions. The contact value is SNMP readable and settable.

Usage: Specify the name of a contact person or department. You can enter up to 80 characters. The default is null.

Example: set contact = rchu

Location: SNMP

See Also: Location

Context

Description: A subprofile containing controller-configuration subprofiles, one for each redundant controller.

Usage: With Redundancy as the working profile, use the List command to display the Context subprofile. For example:

```
admin> list redundancy
[in REDUNDANCY]
context[1]={ initial no-function no-mandate no-function +
context[2]={ initial no-function no-mandate no-function +
```

To close the Context subprofile and return to a higher context in the profile:

```
admin> list ..
```

Location: Redundancy

See Also: Context N

Context *N*

Description: A subprofile of the Context subprofile. Context *N* contains configures options for an individual controller. The index for each subprofile is a controller number.

Usage: With a Redundancy profile as the working profile, use the List command to display the configuration for one of the controllers. For example, to display the configuration for the primary controller:

```
admin> list context 1
[in REDUNDANCY:context[1]]
must-agree=False
primary-preference=may-be-primary
```

Use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: Redundancy > Context

See Also: Context

Contract-Name

Description: Specifies a name in one of two profiles.

- In the ATM-Qos profile specifies the unique name of the Quality of Service (QoS) contract used with one or more Asynchronous Transfer Mode (ATM) connections.

- In the ATM-Prefix profile specifies the name of the profile.

Usage:

- In the ATM-Qos profile—Specify a text string of up to 16 characters. The default is null.

- In the ATM-Prefix profile—Specify a name of up to 20 characters. the name specifies the profile with the default index containing the system-generated ATM prefix.

Dependencies: In the ATM-Qos profile only—if Encapsulation-Protocol is not set to ATM or ATM-Circuit, Contract-Name does not apply.

Example:

• For an ATM-Qos profile

set contract-name = contract002

• For an ATM-Prefix profile

set contract-name = target-2

Location: ATM-prefix, ATM-QoS

See Also: ATM-Prefix (profile), LIM-Sparing-Enabled, SPVC-ATM-Address

Control-Bus-Type

Description: Specifies how to send control bus messages.

Usage: Specify one of the following values.

• dpram—(Dual port RAM), a single shared bus between control module (CM) and each line interface module (LIM). It is an extension of the CM processor. This is the default.

• pbus—(packet bus), an ATM start connection between the CM and each LIM.

Example: set control-bus-type = dpram

Location: System

See Also: Controller-Static-Config (profile)

Controller-Static-Config (profile)

Description: Configures auxiliary static parameters for the controller.

Usage: Use the Dir, and Read commands to make this the current profile, then use List as in this example:
admin> **list**
[in CONTROLLER-STATIC-CONFIG]

atm-parameters = { [{ yes 1:17:1 { shelf-1 trunk-module-1 1 }+
[in CONTROLLER-STATIC-CONFIG:atm-parameters]
outgoing-queue = [{ yes 1:17:1 { shelf-1 trunk-module-1 1 }
outgoing-shaper = [{ 0 0 0 } { 0 0 0 } { 0 0 0 } { 0 0 0 }+

Correction-Factor

Description: Pertains to control module self-tests. The system is configured by default to perform background integrity tests of the control module application specific integrated circuit (ASIC) at a specified interval (10 milliseconds by default). correction-factor specifies the number of failures detected before a correction is made.

Usage: The system keeps a history of the past 20 tests. If the correction factor is 1, one failure out of past 20 tests result in a correction. If the correction factor is 5, five failures out of 20 result in a correction. Values can be from 1 to 20. The default is 5.

Example: set correction-factor = 6

Location: System-Integrity > Integrity-Config

See Also: Encapsulation-Protocol,Enable-Continuous-Detection, Ratio-Centralized-Detection

Coset-Enabled

Description: *Not currently used.* Specifies whether the asynchronous transfer protocol (ATM) Forum polynomial (coset polynomial) is added to the header error check (HEC) before the HEC verification of a received cell.

Usage: When this parameter becomes available, you will be able to specify one of the following values:

- Yes—In the transmit direction, this selection enables generation of a HEC with the coset polynomial value. Yes signifies that the ATM Forum polynomial (coset polynomial) be added to HEC before the HEC verification of a received cell. This is the default.

- No— signifies that the ATM Forum polynomial (coset polynomial) is not added to HEC before HEC verification of a received cell. In the transmit direction. Selecting no enables generation of a HEC without the coset polynomial value.

Example: set coset-enabled = no

Location: DS1-ATM { shelf-*N* slot-*N N*} > Line-Config

See Also: Clock-Source, Clock-Priority, Front-End-Type, PCM-Mode, Scrambling-Enabled

Countries-Enabled

Description: Indicates the bit set identifying the countries enabled in this Stinger unit.

Usage: The Countries-Enabled setting is read-only.

Example: countries-enabled = 511

Location: Base

See Also: AIM-Enabled, Data-Call-Enabled, Max-Switched-VCC-VPI, Multi-Rate-Enabled, R2-Signaling-Enabled, Switched-Enabled

CP-Bit-Error-Count

Description: Indicates the number of parity errors on C-Bit-Parity lines since the last time the unit was reset.

Usage: The CP-Bit-Error-Count value is read-only.

Example: cp-bit-error-count = 0

Location: DS3-ATM-Stat {shelf-*N* slot-*N N*}

See Also: AIS-Receive, BPV-Error-Count, F-Bit-Error-Count, FEB-Error-Count, Line-State, Loss-of-Frame, Yellow-Receive

Cross-Connect-Index

Description: Indicates the cross-connect index in the AToM MIB. For related information, see the *Stinger Private Network-to-Network Interface (PNNI) Supplement*.

Usage: Read-only field.

Example: `set cross-connect-index = 0`

Location: Connection *station*

See Also: ATM-Options

Cslip-Auto-Detect

Description: Specifies whether auto detecting of SLIP header compression is enabled or not.This feature will try to auto-detect whether the caller is using Van Jacobson header compression. If so, the box automatically switches to CSLIP mode.

Usage: Valid values are as follows:

- `Yes`—Specifies that auto detecting of SLIP header compression is enabled.
- `No`—Specifies that auto detecting of SLIP header compression is not enabled. This is the default.

Example: set cslip-auto-detect = no

Location: Terminal-Server > Slip-Mode-Configuration

See Also: SLIP, SLIP-BOOTP

Ctd-Pm

Description: Specifies the proportional multiplier (a percentage) used to determine significant change for the cell transfer delay (CTD) metrics.

Usage: Cell transfer delay is the elapsed time between a cell exit event at one interface (such as the source user-network interface (UNI)) and the corresponding cell entry event at another interface (such as the destination UNI) for a connection. The cell transfer delay between two measurement points is the sum of the total inter-ATM node transmission delay. Specify a percentage from 1 to 99. The default is 50.

Example: set ctd-pm = 60

Location: PNNI-Node-Config *N*: Node-timer

See Also: Avcr-Mt, Avcr-Pm, Cdv-Pm, Hello-Holddown, Hello-Inactivity-Factor, Hello-Interval, Hlink-Inact, PTSE-Holddown, PTSE-Refresh-Interval, PTSE-Lifetime-Factor

Ctone-Tone

Description: Specifies the type of tone to be used for control tone in the copper loop test.

Usage: The following are valid values.

- quiet—Specifies the quiet type of tone. This is the default.
- restore—Specifies that normal tone type is restored.

Example: ctone-tone = quiet

Location: Clt-Command

See Also: Ctone-Type

Ctone-Type

Description: Specifies the type of digital subscriber line (DSL) service (ADSL, GLITE) to use for the control tone.

Usage: Valid values are as follows:

- adsl—Specifies dsl service ADSL is used for the control tone. This is the default.
- glite—Specifies dsl service G.LITE is used for the control tone.

Example: set ctone-typt = glite

Location: Clt-Command

See Also: Ctone-Tone

Current-State

Description: Indicates the read-only sate of a slot, a permanent virtual circuit (PVC), or an ATM virtual channel connection (VCC), depending on the profile.

Usage: Appears in the Slot-State, ATMPVC-Stat, and ATMVCC-State profiles and can have the following values:

- In a Slot-State profile, Current-State indicates the current operational state of the slot and can have one of the following values:

  Oper-State-Down—The slot is in a nonoperational state.

  Oper-State-Up— The slot is in normal operations mode.

  Oper-State-Diag—The slot is in diagnostics mode.

  Oper-State-Dump—The slot is dumping its memory.

  Oper-State-Pend—The slot is no longer down, but is not yet ready for normal operation. This value denotes a transitional state in which additional shelf-to-slot communications are required to make the slot fully operational.

  Oper-State-Post indicates— The slot is running a self-test.

  Oper-State-None— The slot is empty.

- In an ATMPVC-Stat profile, Current-State indicates the current state of the Asynchronous Transfer Mode (ATM) Permanent Virtual Circuit (PVC) and can have one of the following values:

`pvc-inactive`—The PVC is inactive.

`pvc-closed`—The PVC exists, but it is closed.

`pvc-data-transfer`—The PVC is active and data can be transferred.

- In an ATMVCC-Stat profile, Current-State indicates the current state of the ATM Virtual Channel Connection (VCC) and can have one of the following values:

`vcc-inactive`—The VCC is inactive.

`vcc-closed`—The VCC exists, but it is closed.

`vcc-data-transfer`—The VCC is active and data can be transferred.

Location: ATMPVC-Stat *circuit-name*, ATMVCC-Stat *circuit-name*, Slot-State {shelf-*N* slot-*N N*}

See Also: Line-State

Curr-Node-Id

Description: Specifies the value the unit is currently using to represent itself as this Private Network-to-Network Interface (PNNI) node.

Usage: Specify either the PNNI node ID generated by the system or the ID manually entered for the Node-Id parameter.

Example: set curr-node-id = 48:a0:39:84:0f:80:01:bc:72:00:01:d0:6a:96:00:ff:d0:6a:+

Location: PNNI-Node-Config

See Also: Curr-Node-Peer-Group-Id

Curr-Node-Peer-Group-Id

Description: Specifies the value the unit is currently using as its peer group ID.

Usage: Either the Private Network-to-Network Interface (PNNI) peer group ID generated by the system, or the ID manually entered in the Node-Peer-Group-Id field.

Example: set curr-node-peer-group-id = 48:39:84:0f:80:01:bc:72:00:01:00:00:00:00

Location: PNNI-Node-Config

See Also: Curr-Node-Id, Node-Peer-Group-Id

D

DADSL-ATM-24

Description: Specifies whether code images for ADSL-24-Port Line Interface Modules (LIMs) should be stored in Flash memory.

Usage: Valid values are as follows:

- `auto`—Load code image if there is a module installed of that type. Otherwise, skip it. This is the default.
- `load`—Load code image when present in tar file
- `skip`—Skip code image when present in tar file

Example: `dadsl-atm-24 = auto`

Location: Load-Select

See Also: 48-DMT-ADSL

Data-Call-Enabled

Description: Indicates whether the Stinger unit supports data calls over integrated services digital network (ISDN) lines.

Usage: The Data-Call-Enabled parameter setting is read only. `Yes` indicates that the Stinger unit supports data calls over ISDN lines. `No` indicates that the Stinger unit does not support data calls over ISDN lines.

Example: `data-call-enabled = yes`

Location: Base

See Also: AIM-Enabled, Countries-Enabled, D-Channel-Enabled, Max-Switched-VCC-VPI, Multi-Rate-Enabled, Network-Management-Enabled, R2-Signaling-Enabled, Selectools-Enabled, Switched-Enabled

Data-Filter

Description: Specifies the filter used to determine whether it should forward or drop a packet. If the Stinger unit applies both a call filter and a data filter to a connection, it applies the data filter first. Only those packets that the data filter forwards can reach the call filter.

Usage: Specify the filter name. The default is null, which specifies that the Stinger unit does not apply a data filter.

Example: `set data-filter = ip-spoof`

Dependencies: Data-Filter applies only when the Filter-Name setting specifies a data filter.

Location: Answer-Defaults > Session-Info, Connection station > Session-Options

See Also: Call-Filter, Filter-Name, Filter-Persistence, Session-Info, Session-Options

Data-IP-Address

Description: Specifies the IP address of the Ethernet port to be used for stacking data traffic. The system advertises the address to other members of the stack in stacking control packets, and those systems, in turn, send stacking data packets to the address you specify.

Usage: Specify an IP address in dotted decimal notation. The default is 0.0.0.0, which specifies that the System IP-Addr is advertised instead of the Data-IP-Address value.

Example: `set data-ip-address = 1.1.1.1`

Dependencies: the Stinger unit supports a soft IP interface, which is an internal interface that never goes down. Routing protocols always advertise the soft interface address as reachable on all interfaces that are up and running a routing protocol. Like the System-IP-Addr, the Data-IP-Address is an area of memory that contains the address of one of the Ethernet interfaces of the Stinger unit.

If the specified interface becomes unavailable, all stacking data packets destined for the interface are lost. Some applications use the soft interface for the Data-IP-Address value in order to keep from being bound to a particular interface. To use the soft interface as the destination for stacking data packets, enter the soft IP interface address for Data-IP-Address.

Location: Stacking *name*

See Also: Multicast-Address, Multicast-Interface-IP-Address

Data-Rate-Mode

Description: Specifies the per-session DSL data-rate mode.

Usage: Valid values are as follows:
- `autobaud`—Specifies that a DSL modem should train up to a set data rate. If a DSL modem cannot train to this data rate, it connects to the closest rate to which it can train (the modem's ceiling rate).
- `singlebaud`—Specifies that the device trains to a single data rate, even if the DSL modem can train at a higher or lower data rate. Currently, only the singlebaud setting is supported on the SDSL module.

Example: `data-rate-mode = singlebaud`

Location: SDSL {shelf-*N* slot-*N N*} > Line-Config

See Also: Ses-Rate-Mode, Ses-Rate-Type

Data-Service

Description: Specifies the type of service requested of the switch for a switched connection. Specifies the bandwidth to use per channel for a nailed-up connection.

Usage: Valid values are as follows:

- `voice`—The call is set up as a voice call, even if the Stinger unit transmits data over the channel. This setting is for switched calls only.

- `56k`—The data rate to use with a switched-services line that uses AMI and/or robbed-bit signaling.

- `56k-Restricted`—Data is transmitted to meet the density requirements for AMI-encoded lines.This is the default.

- `56k-clear`—The call is set up as a data call that uses 56 Kbps of the bandwidth of the data channel.

- `64k-restricted`—The call is set up as a data call at a rate of 64 Kbps on an AMI-encoded line on which the sender transmits only non-zero data. Use this setting with LAPD and AMI signaling.

- `64k-clear`—The call is set up as a data call that uses the full 64-Kbps bandwidth of the data channel. Use this setting with B8ZS, LAPD, SS7 signaling, and to support 128K IDSL.

- `144-clear`—Setting to support 144K IDSL

- `384k-clear`—The call is set up as a data call that connects to the Switched-384 data service. This AT&T data service does not require Multi-Rate or GlobanD. (switched calls only)

- `384k-restricted`—The call is set up as a data call that connects to Multi-Rate or GlobanD data services at 384Kbps. (switched calls only)

- `dws-384-clear`—A 384Kbps call coded as Multi-Rate, not H0. This setting is for switched calls only.

- `1536k-restricted`—The same as 1536K-Clear setting, but with a request for restricted data transfer. A binary 1 is inserted with each transmission in the least significant bit. This setting is for switched calls only.

- `128-` to `1472-kbps-clear`—Available on a line with Multi-Rate or GlobanD data services. This setting is for switched calls only. You can specify any of the the following values in multiples of 64:128k-clear, 192k-clear, 256k-clear, 320k-clear, 448k-clear, 512k-clear, 576k-clear, 640k-clear, 704k-clear, 768k-clear, 832k-clear, 896k-clear, 960k-clear, 1024k-clear, 1088k-clear, 1152k-clear, 1216k-clear, 1280k-clear, 1344k-clear, 1408k-clear, 1472k-clear

Example: `set data-service = voice`

Dependencies: To ensure data integrity when Data-Service = Voice:

- Use only digital end-to-end connectivity. No analog signals should be present anywhere in the link.

- Make sure that the phone company is not using any intervening loss plans to economize on voice calls.

- Do not use echo cancellation. Analog lines can echo, and the technology that takes out the echoes can also scramble data in the link.

- Do not make any modifications that can change the data in the link.

• You must set this parameter for the Userstat command to display the correct speed setting.

Location: Connection *station* > Telco-Options

See Also: Telco-Options

Date

Description: A subprofile that shows the day of the week and the current system date.

Usage: With the Timedate profile as the working profile, list the Date subprofile.

```
admin> list date
[in TIMEDATE]
weekday=Friday
month=October
day=18
year=1996
```

Use the Set command to modify the settings in the subprofile.

```
admin> set weekday=Saturday
admin> set day = 19
```

Note: You can also use the Date command to set the day of the week and the system date.

Example: set date day = 19

Location: Timedate

See Also: Time

DCEN392-Val

Description: Specifies the total number of errors during DCE-N39-monitored events that causes the network side to declare the user side's procedures inactive.

Usage: Specify a value from 1 to 10. The value you specify must be less than the DCEN393-Val parameter value. The default is 3.

Example: set dcen392-val = 7

Dependencies: If Link-Type = DTE, DCEN392-Val does not apply.

Location: Frame-Relay *fr-name*

See Also: Link-Type

DCEN393-Val

Description: Specifies the DCE-monitored event count.

Usage: Specify a value from 1 to 10. The value you specify must be greater than DCEN392-Val. The default is 4.

Example: `set dcen393-val = 8`

Dependencies: If Link-Type = DTE, DCEN393-Val does not apply.

Location: Frame-Relay *fr-name*

See Also: Link-Type

D-Channel-Enabled

Description: Indicates whether the unit enables D-channel (ISDN) signaling.

Usage: The D-Channel-Enabled setting is read only. `Yes` indicates that the unit supports D-channel signaling. `No` indicates that the unit does not support D-channel signaling.

Location: Base

See Also: Data-Call-Enabled, Multi-Rate-Enabled, R2-Signaling-Enabled, Switched-Enabled

Decrement-Channel-Count

Description: Specifies the number of channels the Stinger unit removes as a bundle when bandwidth changes, either manually or automatically, during a call.

Usage: Specify an integer from 1 to 32. The default is 1.

Example: `set decrement-channel-count = 2`

Dependencies: You cannot clear a call by decrementing channels.

Location: Answer-Defaults > MPP-Answer, Connection station > MPP-Options

See Also: Add-Persistence, Bandwidth-Monitor-Direction, Base-Channel-Count, Dynamic-Algorithm, Increment-Channel-Count, Maximum-Channels, Minimum-Channels

Default-Status

Description: Specifies whether or not the Stinger unit displays the status screen by default when the user logs in.

Usage: Valid values are as follows:

- `Yes`—Specifies that the Stinger unit displays the status screen when it authenticates the profile.
- `No`—Specifies that the Stinger unit does not display the status screen when it authenticates the profile. This is the default.

Example: `set default-status = yes`

Dependencies: Default-Status applies to Telnet and console logins. It does not apply to use of the Auth command.

Location: User *name*

See Also: Bottom-Status, Leadership-Priority, Top-Status

Defect-Ratio

Description: Specifies the defect to no-defect ratio.

Usage: Enter a number between 0 (zero) and 2147483647.

Example: `defect-ratio = 10`

Location: DS1-ATM { shelf-*N* slot-*N N*} > Line-Config > IMA-Option-Config > Rxlink-Config

See Also: Add-Link-Cond-Time, Defect-Ratio, Fault-Clearing-Time, Fault-Clearing-Type, In-Defect-Int-Time, Rec-Link-Cond-Time, Rx-Lid-Learning-Time

Delay

Description: Specifies the number of seconds the Stinger unit waits for PPP packets before it changes to terminal-server mode on an incoming modem or V.120 call. If it detects PPP, the Stinger unit routes the packets to its router. Otherwise, it displays the Telnet or terminal-server login prompt. If the caller's Connection profile specifies Password Authentication Protocol (PAP) or Challenge Handshake Authentication Protocol (CHAP) authentication, and the first data received at the Telnet or terminal-server login prompt is PPP-encapsulated, the Stinger unit transitions to packet-mode processing immediately.

Usage: Specify an integer from 1 to 60. The default is 5.

Example: `setdelay = 15`

Dependencies: If terminal services are disabled, Delay does not apply.

Location: Terminal-Server > PPP-Mode-Configuration

Delay-Callback

Description: *Not currently use*d. Specifies the number of seconds the Stinger unit waits before calling back a remote user.

Usage: Specify an integer from 0 to 60. The unit treats values of 0 to 3 as 3 seconds. The default is 0 (zero).

Example: `delay-callback = 0`

Location: Connection *station* > Telco-Options

See Also: Call-By-Call, NAS-Port-Type, Transit-Number

Delta-Cell-Delin-Value

Description: Specifies the number of consecutive cells with correct header error count (HEC) to leave the PRESYNC state to go to the SYNC state.

Usage: Specify a number between one and 16. The default is six (6).

Example: `delta-cell-delin-value = 16`

Location: IMAHW-CONFIG { shelf-*N* slot-*N N*}]

See Also: Alpha-Cell-Delin-Value, Alpha-IMA-Value

Desired-State

Description: Specifies the desired administrative state of a device. The actual state of the device can differ from the desired state, as when a device is starting (powering up), or if you change the desired state on a running slot. Changing the desired state does not force a device to the new state. It indicates that the Stinger unit should change the device state in a graceful manner.

Usage: Valid values are as follows:

- `Admin-State-Down`—Specifies that the addressed device should terminate all operations and enter the down state.
- `Admin-State-Up`—Specifies that the addressed device should come up in normal operations mode.

Dependencies: You can change the administrative state of a device by using the SNMP Set commands or the Stinger unit Slot-d and Slot-u commands.

Example: `set desired-state = admin-state-up`

Location: Admin-State-Perm-If *station*, Admin-State-Phys-If {shelf-*N* slot-*N N*}

See Also: Desired-Trap-State, Device-Address, Inet-Profile-Type, Slot-Type, SNMP (profile)

Desired-Trap-State

Description: Indicates whether LinkUp and LinkDown notifications (traps) have been enabled.

Usage: The Desired-Trap-State setting is read only. The system can set it to one of the following values:

- Trap-State-Enabled indicates that an operator has specified that LinkUp/LinkDown traps should be generated for the interface.
- Trap-State-Disabled indicates that an operator has specified that linkUp/linkDown traps should not be generated for the interface.

Example: desired-trap-state = trap-state-enabled

Location: Admin-State-Perm-If *station*, Admin-State-Phys-If {shelf-*N* slot-*N N*}

See Also: Desired-State, Device-Address, Slot-Type

Dest-Address

Dependencies: Specifies a destination IP address.

Usage: Specify an IP address. The default is 0.0.0.0.

- In an IP-Route profile or a Route-Description-List N subprofile, the null address represents a default route. Packets whose destinations do not match an entry in the routing table are forwarded to the default route.

- In a Filter profile, the Stinger unit compares Dest-Address to a packet's destination address after applying the Dest-Address-Mask value.

Example: `dest-address = 10.2.3.4`

Dependencies: In a Filter profile, Dest-Address applies only if Type is set to IP-Filter or TOS-Filter.

Location: Filter filter-name > Input-Filters > IP-Filter,
Filter filter-name > Output-Filters > IP-Filter, Filter filter-name > Input-Filters > TOS-Filter,
Private-Route-Table name > Route-Description-List > Route-Description-List N

See Also: Type

Detect-End-Of-Packet

Description: Enable/disable detection of the end of a packet.

Usage: Valid values are as follows:

- `Yes`—Specifies end of packet detection is enabled.

- `No`—Specifies end of packet detectionis not enabled. This is the default.

Example: `detect-end-of-packet = yes`

Location: Connection > Tcp-Clear-Options

See Also: Detect-End-Of-Packet, End-Of-Packet-Pattern, Force-56Kbps, Host, Port, Facility, Host, Immediate-Mode-Options, Save-Number, Service, Syslog-Enabled

Detection-Interval

Description: Specifies the detection interval in milliseconds for continuous detection.

Usage: The system tries to detect any abnormality at the defined milliseconds interval. The recommended value is 100 milliseconds for control modules. Values can be from 0 (zero) to 65535. The default is 100.

Example: `detection-interval = 100`

Location: System Integrity > Integrity-Config

See Also: Encapsulation-Protocol, Enable-Continuous-Detection
Ratio-Centralized-Detection

Device-Address

Description: Specifies the address of a module.

Usage: The device address has the format {shelf slot item}, where

Syntax element	Description
shelf	Specifies the shelf in which the item resides. If you are using a single-shelf system, the shelf number is always 1.
slot	Specifies the number of the item's expansion slot. Physical expansion slots are numbered from 1 to 16, starting with 1 for the slot just below the shelf controller. The slot value 17, controller, or c specifies the shelf controller module.
	For example, to address the first slot on shelf 1:
	{ 1 1 0 }
item	Specifies an item on the slot module. Items are numbered starting with #1 for the leftmost item on the module. An item number of 0 (zero) denotes the entire slot. For example, to address SDSL port #48 on a module in slot #2 on shelf 1:
	{ 1 2 48 }

In most cases, the Device-Address value is obtained from the system. However, you can clone a profile by reading an existing one and changing its device address. Use the List and Set commands to modify the Device-Address value. For example:

```
admin> list device-address
[in ADMIN-STATE-PHYS-IF { shelf-1 slot-9 37 }]
shelf=shelf-1
slot=slot-9
item-number=37

admin> set shelf = shelf-2
```

As an alternative, you can just use the Set command. For example:

```
admin> set device-address shelf = shelf-2
```

Location: Admin-State-Phys-If {shelf-*N* slot-*N N*}, Device-State {{shelf-*N* slot-*N N*} *N*}

See Also: Item-Number, Physical-Address, Shelf, Slot

Device-State

Description: Indicates the current operational state of a device.

Usage: Device-State is read only. The following are valid values:

- down-dev-state—Indicates that the device is in a nonoperational state.
- up-dev-state—Indicates that the device is in normal operations mode.
- none-dev-state—Indicates that the device does not currently exist.

Example: set device-state = up-dev-state

Location: Device-State {{shelf-*N* slot-*N N*} *N*}

See Also: Reqd-State

Device-State (profile)

Description: Stores the current state of a device. The Stinger unit does not store the Device-State profile in NVRAM, so the profile's settings do not persist across system resets or power cycles. The Device-State setting might differ from the Reqd-State setting during state changes, such as when a device is being disconnected. State changes are complete when the Device-State and the Reqd-State match.

Usage: To make Device-State the working profile, use the Read command, and specify a shelf, slot, item, and logical item number.

Example: To make Device-State the working profile for the device at interface address {{1 4 2}15}:

```
admin> read device-state {{1 4 2}15}
DEVICE-STATE/{ { shelf-1 slot-4 2 } 15 } read

admin> list
[in DEVICE-STATE/{ { shelf-1 slot-4 2 } 15 }]
device-address*={ { shelf-1 slot-4 2 } 15 }
device-state=down-dev-state
up-status=idle-up-status
reqd-state=up-reqd-state
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
DEVICE-STATE/{ { shelf-1 slot-4 2 } 15 } written
```

Dependencies: An SNMP manager can read the Device-State profile.

See Also: Device-Address, Device-State, Reqd-State, Up-Status

Device-Type

Description: *Not currently used.* Specifies whether the interface is advertised in interim local management interface (ILMI) as a private or public device type.

Usage: The default setting is `private`.

Example: `device-type = private`

Location: ATM-IF-CONFIG { { any-shelf any-slot *N* } *N* } > Extension-Config

Dev-Line-State

Description: Indicates the status of the ADSL or SDSL interface.

Usage: The Dev-Line-State value is read only.

ADSL values

For the ADSL interface, Dev-Line-State can have one of the following values:

- `down`—There is no connection or the interface is disabled.
- `activation`—The interface is trying to train but is not yet detecting a modem at the other end.
- `training`—The interface is training with a modem on the other end.
- `port-up`—The interface successfully trained up.
- `failed`—The interface failed training. (A log message specifies the reason.)
- `loopback`—The interface is in loopback test mode.

SDSL values

For an SDSL interface, Dev-Line-State can have one of the following values:

- `config`—The interface is being configured.
- `deactivate`—Transitioning to the Down state.
- `inactive`—Starting up.
- `activating`—Waiting for customer premises equipment (CPE) to start up.
- `active-rx`—Waiting for 4-level transmission from CPE.
- `port-up`—Connected to CPE and data can be transferred.
- `portup-pending-deactive`—Loss-of-signal or noise-margin error (noise greater than -5dB).
- `deactivate-lost`—Waiting for loss-of-signal timer to expire.
- `hardware-test`—Hardware self-test is in progress.
- `out-of-service`—Interface is out of service.
- `tip-ring-detect`—Running a simple internal bit-error rate test (BERT) to detect correct tip-ring orientation.
- `forever-bert`—Running internal BERT to detect correct tip-ring orientation.
- `tip-wait1`—Running internal BERT to detect correct tip-ring orientation.
- `tip-hunt`—Running internal BERT to detect correct tip-ring orientation.
- `tip-wait2`—Running internal BERT to detect correct tip-ring orientation.
- `cell-delineation`—Attempting to recover ATM cells (idle cells as well as data cells) from the receiving octets. If recovery is successful, the interface transitions to the Up state.
- `deactivate-wait`—Waiting to transition to the Down state.

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Status,
 SDSL-Stat {shelf-*N* slot-*N N*} > Physical-Status

See Also: If-Group-Index, Major-Firmware-Ver, Minor-Firmware-Ver, Unit-Type,
Up-Stream-Rate

Dial-Number

Description: Specifies the phone number used to dial the connection.

Usage: Specify the phone number of the remote station. You can enter up to 24 characters. The default is null.

Example: `set dial-number = 510-555-1212`

Location: Connection *station*

See Also: CalledNumber

Dialout

Description: Specifies the password for the Dialout pseudo user.

Usage: Text field, 21 characters.

Example: `dialout = mypass`

Location: External-Auth > Password-Profile

See Also: Dialout, Pool

Dialout-Configuration

Description: Use this subprofile to configure dialout settings.

Usage: Use the New or Dir and Read commands to make this the current profile, then use the List command. Following is sample listing.

```
admin> list dialout-configuration
[in TERMINAL-SERVER:dialout-configuration]
enabled = no
direct-access = no
port-for-direct-access = 5000
password-for-direct-access = ""
```

Dialout-Poison

Description: Specifies whether the Stinger unit should stop advertising its IP dialout routes (poison the routes) when no trunks are available.

The `yes` setting solves a problem that can otherwise occur when two or more units on the same network are configured with redundant profiles and routes. If Dialout-Poison is set to no, and one of the redundant units loses its trunks temporarily, that unit continues to receive outgoing packets that should be forwarded to one of the other redundant units.

Usage: Valid values are as follows:

- `Yes`—Specifies that the Stinger unit stops advertising its IP dial-out routes if no trunks are available.

- No—Specifies that the Stinger unit continues to advertise its dialout routes, even if no trunks are currently available. No is the appropriate setting unless you have redundant units or don't use dialout routes. This is the default.

Example: `dialout-poison = no`

Location: IP-Global

See Also: RIP-Policy

Dialout-Routes

Description: Specifies the password for the Dialout routes pseudo user.

Usage: Text field, 21 characters.

Example: `dialout-routes = mypass`

Dependencies:

Location: External-Auth > Password-Profile

See Also: Dialout, Pool

Diff-Delay-Max

Description: Specifies the maximum differential delay of the inverse multiplexing for Asynchronous Transfer Mode (ATM) group in milliseconds. For example if line 1 in the IMA group has a delay of 10 milliseconds, line 2 has a delay of 25 milliseconds and line 3 has a delay of 5 milliseconds, the maximum differential delay among the 3 lines is 25 minus 5, or 20 milliseconds.

Usage: Specify a number between from 0 (zero) to 281. The default is 25.

Example: `set Diff-Delay-Max = 20`

Location: IMAGroup *name*

See Also: ATM-If-Delay, Check-Far-End-IMA-Id

Diff-Delay-Max-Obs

Description: Indicates the latest maximum differential delay observed (in milliseconds) between the links having the least and most link propagation delay, among the receive links that are currently configured in the inverse multiplexing for ATM (IMA) group.

Usage: Range of values for this read-only parameter is from 0 (zero) to 2147483647

Example: `diff-delay-max-obs = 0`

Location: IMA-Group-Stat *name*

See Also: Least-Delay-Link, Running-Secs, Rx-Avail-Cellrate

Direct

Description: Specifies whether PPP negotiation is initiated immediately after an interactive user enters the PPP command in the terminal-server interface.

Usage: Valid values are as follows:

- `Yes`—Specifies direct PPP negotiation.
- `No`—Specifies that the terminal server waits to receive a PPP packet before beginning PPP negotiation. This is the default.

Example: set direct = yes

Dependencies: If terminal services are disabled, Direct does not apply.

Location: Terminal-Server > PPP-Mode-Configuration

Direct-Access

Description: Specifies whether the direct-access dial-out feature is enables or disabled.

Usage: Valid values are as follows:

- `Yes`—Specifiess that a user can access a modem for direct-access dial-out service by initiating a Telnet session on the port specified by Port-For-Direct-Access.
- `No`—Specifies that the direct-access dial-out feature is disabled. This is the default.

Example: direct-access = yes

Dependencies: If terminal services are disabled, Direct-Access does not apply.

Location: Terminal-Server > Dialout-Configuration

See Also: Dialout-Configuration, Password-For-Direct-Access, Port-For-Direct-Access

Directed-Broadcast-Allowed

Description: Specifies whether the Stinger unit forwards directed broadcast traffic onto the interface and its network.

Usage: Valid values are as follows:

- `Yes`—Specifies that the Stinger unit forwards directed broadcast traffic onto the interface and its network. This is the default.
- `No`—Specifies that the Stinger unit drops directed broadcast traffic that is not generated locally, preventing it from propagating onto intermediary networks.

Example: set directed-broadcast-allowed = no

Dependencies: To protect all of the LAN interfaces against denial of services (DoS) attacks that use directed broadcast traffic, you must set directed-broadcast-allowed = No in all IP-Interface profiles.

Location: IP-Interface {{shelf-*N* slot-*N N*} *N*}

See Also: ICMP-Reply-Directed-Bcast

Disabled-Count

Description: Indicates the number of devices that are in the down state.

Usage: The Disabled-Count setting is read only.

Example: `disabled-count = 0`

Location: Device-Summary

See Also: Operational-Count, Total-Count

Disconnect-On-Auth-Timeout

Description: *Not currently used.* Instructs the Stinger unit to disconnect a PPP connection if it times out while waiting for Remote Authentication Dial-In User Service (RADIUS) authentication.

Dmmall-Input-Imp

Description: In a copper loop test (CLT) specifies the Input Impedance (100, 1000 Kohm).

Usage: Specify a number between zero (0) and 65535. Default is zero.

Example: `dmmall-input-imp = 0`

Location: CLT-Command

See Also: CLTm-Slot, Dmm-Lead, Dmm-Type, Test-Operation

Dmmall-Period

Description: Specifies the amount of time allowed when the measurement is made in a copper loop test (CLT) .

Usage: Specify a number between one and five. Each unit represents 100 milliseconds. Enter zero (0) for MAX.

Example: `set dmmall-period = 1`

Location: CLT-Command

See Also: CLTm-Slot, Dmm-Lead, Dmm-Type, Test-Operation

Dmmall-Type

Description: Specifies the DMM Measurement Type used in the cooper loop test (CLT)

Usage: Specify one of the following.

Option	Description
resistance	DMM measurement type OHM
dc-voltage	DMM measurement type DCV
ac-voltage	DMM measurement type ACV
capacitance	DMM measurement type CAP

Example: `dmmall-type = resistance`

Location: CLT-Command

See Also: CLTm-Slot, Dmm-Lead, Dmm-Type, Test-Operation

Dmmcap-Period

Description: Specifies the amount of time measurement is made in a copper loop test (CLT) .

Usage: Specify a number between one and five. Each unit represents 100 milliseconds. Enter zero (0) for MAX.

Example: `dmmcap-period = 2`

Location: CLT-Command

See Also: CLTm-Slot, Dmm-Lead, Dmm-Type, Test-Operation

Dmmdcd-Impedance

Description: Specifies the output impedance in Kohms to be used in a copper loop test (CLT).

Usage: Specify a number between 10 and 1000. The default is 10.

Example: `dmmdcd-impedance = 1000`

Location: CLT-Command

See Also: CLTm-Slot, Dmm-Lead, Dmm-Type, Test-Operation

Dmmdcd-Period

Description: Specifies the amount of time measurement is made in 100 millisecond units in a copper loop test (CLT).

Usage: Specify a number between one and five. Each unit represents 100 milliseconds. Enter zero (0) for MAX. The default is 0.

Example: dmmdcd-period = 1

Location: CLT-Command

See Also: CLTm-Slot, Dmm-Lead, Dmm-Type, Test-Operation

Dmmdcd-Voltage

Description: Specifies the test voltage to be used in the copper loop test (CLT).

Usage: Specify a number between minus 230 and 230. The default is zero (0).

Example: dmmdcd-voltage = 230

Location: CLT-Command

See Also: CLTm-Slot, Dmm-Lead, Dmm-Type, Test-Operation

Dmm-Lead

Description: Specifies the digital multimeter (DMM) measurement leads to be used in a copper loop test (CLT).

Usage: The following are valid values:
- `tip-ring`—DMM measurement lead T-R. This is the default.
- `tip-sleeve`—DMM measurement lead T-S
- `ring-sleeve`—DMM measurement lead R-S

Example: set dmm-lead = tip-sleeve

Location: CLT-Command

See Also: CLTm-Slot, Dmm-Lead, Dmm-Type, Test-Operation

Dmm-Result

Description: Indicates the results of a digital multimeter (DMM) test of a copper loop test (CLT).

Usage:
- ACV and DCV are reported in mV.
- Resistance is reported in ohms.
- Capacitance is reported in nF.

Example: dmm-result = 0

Location: CLT-Result

See Also: Test-Result-Status

Dmm-Type

Description: Specifies the type of digital multi-meter (DMM) selection for a copper loop test (CLT). DMM measures AC/DC voltage, resistance, loop resistance and capacitance, loop length.

Usage: The following are valid values:

- `resistance`—DMM measurement type OHM. This is the default.

- `dc-voltage`—DMM measurement type DCV

- `ac-voltage`—DMM measurement type ACV

- `capacitance`—DMM measurement type CAP

Example: `set dmm-type = ohm`

Location: CLT-Command

See Also: CLTm-Slot, Dmm-Lead, Dmm-Type, Test-Operation

DNS-Local-Table

Description: A subprofile that enables you to configure a local Domain Name System (DNS) table of up to eight hostnames and their IP addresses. At system startup, the unit copies the values from the subprofile to the table in RAM. If you subsequently modify the DNS-Local-Table subprofile, the changes are propagated to the table in RAM when you Write the subprofile.

Note: The local DNS table has space for the number of addresses per hostname specified by the DNS-List-Size setting. However, the DNS-Local-Table subprofile allows only a single IP address per hostname.

Usage: With IP-Global as the working profile, list the DNS-Local-Table subprofile. You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile, enter the List command, followed by a space and two periods. Profile and Parameter Reference DNS-Primary-Server

Example: To list the contents of the DNS-Local-Table subprofile:

```
admin> list dns-local-table
[in IP-GLOBAL:dns-local-table]
enabled = no
auto-update = no
table-config = [ { "" 0.0.0.0 } { "" 0.0.0.0 } { "" 0.0.0.0 } +
```

To return to a higher context in the working profile:

```
admin> list ..
```

Dependencies: Consider the following

- The local DNS table applies to all slot modules that support DNS.

- If you modify the DNS-Local-Table subprofile, assigning a single address to a host, the newly configured address is propagated to the table in RAM. The first address of the hostname entry is overwritten with the configured address, and all remaining addresses are

cleared. If Auto-Update is set to Yes, the next successful DNS query overwrites the configured address and restores the multiple addresses (up to DNS-List-Size).

Location: IP-Global

See Also: Auto-Update

DNS-Primary-Server

Description: Specifies the IP address of the primary Domain Name System (DNS) server for use on connected interfaces or for the Virtual Router (VRouter). If you do not configure client DNS, you can allow the Stinger unit to make your primary and secondary DNS servers available to both WAN users and users on connected networks.

Usage: Specify the IP address of a DNS server. The default is 0.0.0.0, which specifies that no local primary DNS server is available.

Example: `set dns-primary-server = 10.1.2.3/24`

Location: IP-Global, VRouter

See Also: Domain-Name, DNS-Secondary-Server

DNS-Secondary-Server

Description: Specifies the IP address of the secondary Domain Name System (DNS) server for use on connected interfaces or for the Virtual Router (VRouter). The Stinger unit accesses the secondary server if the primary server is not available. If you do not configure client DNS, you can allow the unit to make your primary and secondary DNS servers available to both WAN users and users on connected networks.

Usage: Specify the IP address of the secondary DNS server. The default is 0.0.0.0, which indicates no secondary server.

Example: `dns-secondary-server = 10.57.23.11/24.`

Location: IP-Global, VRouter name

See Also: Domain-Name, DNS-Primary-Server

DNS-Server-Query-Type

Description: Specifies how a domain name server (DNS) server is to be queried.

Usage: Valid values are as follows:

- `udp`—Query DNS server using UDP first, then TCP, if retry requested (TC-bit was set). This is the default.
- `udp-ignore-tc-bit`—Query DNS server using UDP only and ignore TC-bit.
- `tcp`—Query DNS server using TCP only.
- `tcp-keep-open`—Query DNS server using TCP only and attempt to keep the TCP session established (rather than open a new TCP session each time).

Example: `set dns-server-query-type = tcp`

Location: IP_GLOBAL

See Also: Domain-Name, DNS-Primary-Server, DNS-Secondary-Server

Domain-Name

Description: Specifies the local domain name for domain name server (DNS) lookups.

Usage: Specify the local domain name. The default is null.

Example: `set domain-name = abc.com`

Location: IP-Global

Do-Version-Fallback

Description: Specifies whether the Stinger unit automatically falls back to the earlier version of inverse multiplexing ATM (IMA) if the far end Stinger unit is detected to be version the earlier version. If No is specified when this is detected, the unit moves to the configAborted state.

Usage: Valid values are as follows:

- `Yes`—Specifies that he unit falls back from version 1.1 to version 1.0.
- `No`—Specifies that the unit does not fall back, but moves to the configAborted state. This is the default.

Example: `set do-version-fallback = yes`

Location: IMAGroup

See Also: ATM-If-Delay, Check-Far-End-IMA-Id, Diff-Delay-Max, Expected-Far-End-IMA-Id, Group-Symmetry-Mode

Down-Preference

Description: Specifies the preference for an internet protocol (IP) route. The Stinger unit uses this value to determine when to connect a route.

When choosing which route to use, the router first compares the preference values, preferring the lower number. If the preference values are equal, the router compares the metric values, using the route with the lower metric.

Usage: Enter a number from 0 to 214748364. The lower the preference, the more likely the Stinger unit will connect the route.The default is 120.

Example: `down-preference = 255`

Location: Connection *station* > IP-Options

IP-Options, Preference, RIP-Pref, Static-Pref

Downstream-End-Bin

Description: Specifies the ending frequency bin for downstream transmission.

Usage: Specify a number from 32 to 255 for 12- and 24-port link interface modules (LIMS) and 37 to 127 for 48-port LIMs. The default is 255 for 12- and 24-port LIMs and 127 for 48-port LIMs.

Example: `Downstream-End-Bin = 50`

Dependencies: The upstream and downstream start and end bins define the frequency ranges for upstream and downstream data. The frequency for a particular bin is defined as F = bin# x 4.135kHz. You must also make sure to adjust the `max-bitrate` and `min-bitrate` parameters to match the frequency range defined by the start and end bin numbers.

You can use these parameters to adjust the frequency content of the ADSL signals. For example, splitterless ANSI DMT can be supported by appropriate adjustment of the frequency range.

Location: AL-DMT { any-shelf any-slot *N* } > Line-Config

See Also: Max-Bitrate-Down, Max-Bitrate-Up, Min-Bitrate-Down, Min-Bitrate-Up

Down-Stream-Latency

Description: Indicates the operational downstream latency setting.

Usage: Valid values are the following:
- `none`—indicates that the line is not operational.
- `fast`—indicates the setting for least downstream delay is in effect.
- `interleave`—indicates that interleave latency (greater than fast) in is effect

Example: Down-Stream-Latency = interleave

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Status

See Also: Up-Stream-Latency

Down-Stream-Rate-Fast

Description: Indicates the downstream data rate in bits per second when latency is `fast`.

Usage: Read only. Zero (0) means that latency is set to `interleave` or that the data rate is unknown.

Example: down-stream-rate-fast = 0

Location: AL-DMT { any-shelf any-slot *N* } > Physical-Status

See Also: Down-Stream-Rate-Interleave

Down-Stream-Rate-Interleave

Description: Indicates downstream data rate in bits per second when latency is `interleave`.

Usage: Read-only. Zero (0) means that latency is set to `fast` or the data rate is unknown.

Example: `down-stream-rate-interleave = 2944000`

Location: AL-DMT- Stat { shelf-*N* slot-*N N* } > Physical-Status

See Also: Down-Stream-Rate-Fast

Downstream-Start-Bin

Description: Specifies the starting downstream frequency bin.

Usage: Specify a number from 32 to 255. The default is 32.

Example: `set downstream-start-bin = 35`

Location: AL-DMT > Line-Config

See Also: Rate-Adapt-Mode-Down, Rate-Adapt-Mode-Up, Rate-Adapt-Ratio-Down, Rate-Adapt-Ratio-Up

Drop-Source-Routed-IP-Packets

Description: Specifies whether the Stinger unit unit forwards IP packets with the source-route option set.

Usage: Valid values are as follows:
- `Yes`—Specifies that the Stinger unit drops all packets that have a loose or a strict source route among their IP options.
- `No`—Specifies that the Stinger unit forwards all source-routed packets, as described in RFC 1812. This is the default.

Example: `set drop-source-routed-ip-packets = yes`

Location: IP-Global

See Also: IP-Global (profile)

DS1-ATM (profile)

Description: Configures hardware-specific parameters that are common to the IMA chip. For example, because 24-port IMA LIMs contain three chips, three profiles are created. However, because 8-port IMA LIMs contain a single chip, only one profile is created.

Usage: Use the New or Read command to make this the current profile. This example also lists the Line-Config subprofile.

```
admin> new ds1-atm
DS1-ATM/{ any-shelf any-slot 0 } read
```

```
admin> list
[in DS1-ATM/{ any-shelf any-slot 0 } (new)]
name = 0:0:0
physical-address* = { any-shelf any-slot 0 }
enabled = no
line-config = { esf b8zs 4294967246 no-loopback not-eligible
high-priority shor+

admin> list line-config
[in DS1-ATM/{ any-shelf any-slot 0 }:line-config (new)]
frame-type = esf
encoding = b8zs
nailed-group = 4294967246
loopback = no-loopback
clock-source = not-eligible
clock-priority = high-priority
front-end-type = short-haul
line-length = 1-133
line-build-out = 0-db
pcm-mode = clear-channel
coset-enabled = yes
scrambling-enabled = no
hec-correction-enabled = no
vp-switching-vpi = 15
ima-option-config = { { 0 3 fast auto 10 0 } { 3 fast 10 100 auto 10
2500 10000+
```

DS1-ATM-Stat (profile)

Description: Indicates the statistics for DS1-ATM module. Parameters are read only.

Usage: An example listing of a DS1-ATM-Stat profile follows

```
admin> list

[in DS1-ATM-STAT/{ shelf-1 slot-2 12 }]
physical-address* = { shelf-1 slot-2 12 }
line-mode = uni
line-state = disabled
loss-of-carrier = False
loss-of-sync = False
ais-receive = False
yellow-receive = False
ber-receive = False
carrier-established = False
cell-delineation = False
network-loopback = False
vpi-vci-range = vpi-0-15-vci-32-127
vp-switching-vpi = 15
ima-link-status = { not-in-group not-in-group not-in-group
not-in-group no-fail+
ima-link-statistic = { 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 }
```

DS3-ATM

Description: Specifies the action to take when the code image for an DS3-ATM trunk module is present in a Tar file.

Usage: Valid values are as follows:

- `auto`—Specifies that the system to load images for modules that are installed in the Stinger unit, and to skip images for modules that are not installed. This is the default.
- `load`—Specifies that the system to load the image, even if there is no module of that type installed.
- `skip`—Specifies that the system to skip the image, even if there is a module of that type installed.

Dependencies: A module is considered present in the system if a Slot-Type profile exists for that module type. The system creates a Slot-Type profile when it first detects the presence of a module, and does not delete the profile unless the administrator uses the Slot –r command to permanently remove a module that is no longer installed in the system, or clears NVRAM. To ensure that the system does not load unnecessary images, use Slot –r to remove Slot-Type profiles for modules that are no longer installed in the system.

Location: Load-Select

See Also: Detect-End-Of-Packet, Force-56Kbps, Host, HostN, Port, Facility, Host, Immediate-Mode-Options, Save-Number, Service, Syslog-Enabled, Enet2, SDSL, UDS3, Unknown-Cards

DS3-ATM (profile)

Description: Configures a DS3-ATM module.

Usage: To make DS3-ATM the working profile and list its contents, use the Read and List commands. For example:

```
admin> read ds3-atm { 1 1 0 }
DS3-ATM/{ shelf-1 slot-1 0 } read

admin> list
[in DS3-ATM/{ shelf-1 slot-1 0 }]
name=""
physical-address*={ shelf-1 slot-1 0 }
enabled=no
spare-physical-address={ any-shelf any-slot 0 }
sparing-mode=inactive
line-config={ 9 0 static { shelf-1 slot-1 0 } no-loopback no +
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes, execute the Write command. For example:

```
admin> write
DS3-ATM/{ shelf-1 slot-1 0 } written
```

See Also: Line-Config, Sparing-Mode, Spare-Physical-Address

DS3-ATM-Stat (profile)

Description: Indicates the status of a DS3-ATM trunk module.

Usage: Readonly. To make DS3-ATM-Stat the working profile and list its contents, use the Read and List commands. For example:

```
admin> list
[in DC3-ATM-STAT/{ shelf-1 trunk-module-2 1 }]
physical-address* = { shelf-1 trunk-module-2 1 }
line-state = active
spare-physical-address = { any-shelf any-slot 0 }
sparing-state = sparing-none
vpi-vci-range = vpi-0-255-vci-32-8191
vc-switching-vpi = 0
vcc-vpi = [ 0 0 0 0 0 0 0 0 ]
f-bit-error-count = 0
p-bit-error-count = 0
cp-bit-error-count = 0
feb-error-count = 0
bpv-error-count = 0
loss-of-signal = False
loss-of-frame = False
yellow-receive = False
ais-receive = False
```

See Also: AIS-Receive, BPV-Error-Countt, CP-Bit-Error-Count, F-Bit-Error-Count, FEB-Error-Count, Line-State, Loss-of-Frame, Loss-of-Signal, P-Bit-Error-Count, Yellow-Receive

DSL-Threshold (profile)

Description: Configures threshold settings for Digital Subscriber Line (DSL) services.

Usage: Use the Dir, Read, and List commands to make this the current profile. Following is an example listing.

```
techpubs> list
[in DSL-THRESHOLD/default]
name* = default
enabled = yes
atuc-15min-lofs = 0
atuc-15min-loss = 0
atuc-15min-lols = 0
atuc-15min-lprs = 0
atuc-15min-ess = 0
atuc-fast-rate-up = 0
atuc-interleave-rate-up = 0
atuc-fast-rate-down = 0
atuc-interleave-rate-down = 0
atuc-init-failure-trap = disable
```

Dual-link

Description: *Not currently use*d.

Duplex-Mode

Description: Specifies whether the physical Ethernet interface uses full-duplex or half-duplex mode.

Note: The 100BaseT port on the Ethernet-2 module, which is not currently used, will also use full-duplex or half-duplex mode when it becomes available.

Usage: Valid values are as follows:

- `full-duplex`—Provides increased throughput. This is the default.
- `half-duplex`—Enables operation with equipment that does not support full-duplex mode.

Example: In the following example, the port is set to half-duplex mode:

```
admin> read ethernet { 1 7 4 }
ETHERNET/{ shelf-1 slot-7 4 } read

admin> list
[in ETHERNET/{ shelf-1 slot-7 4 }]
interface-address*={ shelf-1 slot-7 4 }
link-state-enabled=no
enabled=yes
ether-if-type=utp
bridging-enabled=no
duplex-mode=full-duplex

admin> set duplex-mode=half

admin> write
ETHERNET/{ shelf-1 slot-7 4 } written
```

Location: Ethernet {shelf-*N* slot-*N N*}

See Also: Ether-IF-Type, Interface-Address, Link-State-Enabled

Dynamic-Algorithm

Description: Specifies the algorithm to use to calculate the average link utilization (ALU) over a specified number of seconds (Seconds-History). After calculating the average, the Stinger unit compares it to the Target-Utilization value. If the average exceeds or falls below the target for a specified number of seconds, the unit adjusts the bandwidth of the connection.

Usage: Valid values are as follows:

- `quadratic`—Specifies that more weight is given to recent samples of bandwidth usage than to older samples. The weighting grows at a quadratic rate. This is the default.
- `linear`—Specifies that more weight is given to recent samples of bandwidth usage than to older samples. The weighting grows at a linear rate.
- `constant`—Specifies that equal weight is given to all samples.

Example: `set dynamic-algorithm = linear`

Location: Answer-Defaults > MPP-Answer, Connection *station* > MPP-Options

See Also: Add-Persistence, Bandwidth-Monitor-Direction, Base-Channel-Count, Decrement-Channel-Count, Seconds-History, Summarize-RIP-Routes, Target-Utilization

E

Early-Packet-Discard

Description: Specifies whether all cells in an asynchronous transfer mode (ATM) packet should be discarded if the first cell cannot be queued.

Usage: Valid values are as follows:

- `Yes`—Specifies that the cell and all remaining cells are discarded. This is the default.
- `No`—Specifies that the cell and all remaining cells are not discarded. However, when the end of the current packet is detected, all the cells in the next packet are discarded.

Example: `set early packet-discard = no`

Dependencies: If Encapsulation-Protocol parameter is not set to ATM or ATM-Circuit, Early-Packet-Discard parameter setting does not apply.

Location: ATM-QoS

See Also: AAL-Type, Contract-Name, Partial-Packet-Discard, QoS-Class

Elapsed-Seconds

Description: Indicates the number of seconds that have elapsed in the current measurement interval of 15 minutes.

Usage: Valid values range from 0 (zero) to 2147483647.

Example: `elapsed-seconds = 0`

Location: DS1-ATM- Stat { shelf-*N* slot-*N N*} > Ima-Link-Statistic

See Also: Elapsed-Seconds, Far-End-Rx-Num-Failures-Counter, Far-End-Rx-Unusable-Secs-Counter, Far-End-Tx-Num-Failures-Counter, Far-End-Tx-Unusable-Secs-Counter, Far-End-Unavail-Secs-Counter

Enable

Description: Enables/disables admission control (CAC) on the port specified in Port-Num in this subprofile.

Usage: Valid values are as follows:

- `Yes`—Specifies CAC is enabled. This is the default.
- `No`—Specifies CAC is not enabled.

Example: `set enable = no`

Dependencies: When the OC3 interface is disabled, it transmits the OC3 Idle Signal to the remote end.

Location: ATM-CONFIG > Trunk-CAC-Config

See Also: Trunk-CAC-Config N

Enable-Centralized-Detection

Description: Specifies whether central integrity checking is enabled by the primary control module for the entire system.

Usage: By default, line interface module (LIM)s perform error correction, which is usually sufficient for most applications. The default is no.

Example: enable-centralized-detection = no

Location: System-Integrity

See Also: Enable-Continuous-Detection, Ratio-Centralized-Detection

Enable-Continuous-Detection

Description: Specifies whether continuous switching fabric testing, detection, and correction is enabled.

Usage: The recommended setting is yes for the control modules and no for the line interface module (LIM)s. The default is yes.

Example: set enable-continuous-detection = no

Location: System-Integrity > Integrity-Config

See Also: Enable-Continuous-Detection, Ratio-Centralized-Detection

Enabled

Description: Specifies whether a feature, interface, or line is enabled or disabled.

Usage: Valid values are as follows:

- Yes—Specifies that a feature, interface, or line is enabled. This is the default for the Ethernet profile.
- No—Specifies that a feature, interface, or line is disabled. This is the default for the all profiles except the Ethernet profile. If Enabled=No in the Ethernet profile, packets routed to and received by the interface are discarded.

Example: set enabled = yes

Dependencies: When the OC3 interface is disabled, it transmits the OC3 idle signal to the remote end.

Location: Alarm *name,* AL-DMT {shelf-*N* slot-*N N*}, Answer-Defaults, DS3-ATM {shelf-*N* slot-*N N*}, Ethernet {shelf-*N* slot-*N N*}, OC3-ATM {shelf-*N* trunk-module-*N N*}, SDSL {shelf-*N* slot-*N N*}, SNMP, Terminal-Server

See Also: Alarm (profile), Allow-Auth-Config-Rqsts, Connection (profile), Ethernet (profile), IP-Global (profile), SDSL (profile), SNMP (profile),Terminal-Server (profile)

Encapsulation-Protocol

Description: Specifies the encapsulation method to use for the connection. Both sides of the connection must support the specified encapsulation method. Usually, encapsulation protocols have their own configuration options within the subprofile of a Connection profile.

Usage: When this parameter becomes available, you will be able to specify one of the following values:Valid values are as follows:Yes—Specifies No—Specifies

Usage: Specify one of the following values:

- ATM—Specifies an Asynchronous Transfer Mode (ATM) connection in routed mode. Packets arriving on the connection are routed at OSI Layer 3.
- ATM-Circuit—Specifies point-to-point switch-through ATM connections. This is the default.
- ATM-Frame-Relay-Circuit—Specifies an ATM-to-Frame Relay link.

Example: set encapsulation-protocol = atm

Location: Connection *station*

Encoding

Description: *Not currently used.* The Asynchronous Transfer Mode (ATM) layer 1 line encoding used for the physical link(s).

Usage: Valid values are

- ami
- b8zs—This is the default.
- hdb3

Example: encoding = ami

Location: DS1-ATM { shelf-*N* slot-*N N*} > Line-Config

See Also: Clock-Source, Frame-Type, Front-End-Type, Loopback, Nailed-Group

End-Of-Packet-Pattern

Description: Specifies the pattern to be matched to detect the end of packet when the detect-end-of-packet parameter is enabled.

Usage: Specify the pattern end text. Up to 64 characters.

Example: set end-of-packet-pattern = ##!

Dependencies: The Detect-End-Of-Pattern parameter must be enabled for the End-of-Packet-Pattern parameter to take effect.

Location: Connection > Tcp-Clear-Options

See Also: Detect-End-Of-Packet, Force-56Kbps, Host, HostN, Port, Facility, Host, Immediate-Mode-Options, Save-Number, Service, Syslog-Enabled

Enet

Description: *Not currently used.* Specifies the action to take when the code image for an Ethernet module is present in a Tar file.

Usage: When this parameter becomes available, you will be able to specify one of the following values:

- `auto`—The system loads images for modules that are installed in the Stinger unit, and skips images for modules that are not installed.This is the default.
- `load`—The system loads the image even if there is no module of that type installed.
- `skip`—The system does not load the image even if there is a module of that type installed.

Example: `Enet = auto`

Dependencies: A module is considered present in the system if a Slot-Type profile exists for that module type. The system creates a Slot-Type profile when it first detects the presence of a module, and does not delete the profile unless the administrator uses the Slot –r command to permanently remove a module that is no longer installed in the system, or clears NVRAM. To ensure that the system does not load unnecessary images, use Slot –r to remove Slot-Type profiles for modules that are no longer installed in the system.

Location: Load-Select

See Also: DS3-ATM, Enet2, SDSL, UDS3, Unknown-Cards

Enet2

Description: *Not currently used.* Specifies the action to take when the code image for an Ethernet-2 module is present in a Tar file.

Usage: When this parameter becomes available, you will be able to specify one of the following values:

- `auto`—The system loads images for modules that are installed in the Stinger unit, and to skip images for modules that are not installed.This is the default.
- `load`—The system loads the image even if there is no module of that type installed.
- `skip`—The system does not load the image even if there is a module of that type installed.

Example: `Enet2 = auto`

Dependencies: A module is considered present in the system if a Slot-Type profile exists for that module type. The system creates a Slot-Type profile when it first detects the presence of a module, and does not delete the profile unless the administrator uses the Slot –r command to permanently remove a module that is no longer installed in the system, or clears NVRAM. To ensure that the system does not load unnecessary images, use Slot –r to remove Slot-Type profiles for modules that are no longer installed in the system.

Location: Load-Select

See Also: DS3-ATM, SDSL, UDS3, Unknown-Cards

Enforce-Address-Security

Description: Specifies whether the Stinger unit validates the IP address of an SNMP manager attempting to access the unit. If address security is not enforced, any SNMP manager that presents the appropriate community name is allowed in.

Usage: Valid values are as follows:

- `Yes`—Specifies that, before allowing access, the Stinger unit compares the source IP address of an SNMP manager to the host addresses specified by Read-Access-Hosts and Write-Access-Hosts.

- `No`—Specifies that the Stinger unit does not compare IP addresses, but uses only the community name to validate SNMP access. This is the default.

Example: `set enforce-address-security = yes`

Dependencies: Read-Access-Hosts and Write-Access-Hosts do not restrict access unless Enforce-Address-Security = Yes.

Location: SNMP

See Also: Write-Access-Hosts

Error (profile)

Description: A read-only profile that provides information about any errors that occur when the Stinger unit is running.

Usage: Use the Read and List commands to make Error the working profile and list its contents. For example:

```
admin> read error 1
ERROR/1 read

admin> list
[in ERROR/1]
is-post=no
type=100
slot=17
user-profile=""
ip-address=0.0.0.0
stack-trace=[ 0 0 0 0 0 0 ]
loadname=unitsr
index*=1
shelf=1
```

See Also: Index, IP-Address, IS-Post, Loadname, Shelf, Slot, Stack-Trace, User-Profile

Error-Averaging-Period

Description: Specifies the length of time the specified error-threshold number displays before the modem stops functioning.

Usage: The default value is 10 seconds.

Example: `set error-averaging-period = 15`

Dependencies: Depends directly on the value of Error-Threshold.

Location: Lim-Sparing-Config > Auto-Lim-Sparing-Config > Lim-Sparing-Config

See Also: Error-Threshold

Error-Count

Description: Indicates the number of errors experienced by each channel.

Usage: This is a read-only setting.

Example: `error-count = 0`

Location: ADSL-Stat {shelf-*N* slot-*N N*}, IDSL- Stat { *N N N* }

Errored-Second

Description: Indicates the number of 1 second intervals (out of a 15-minute sampling period) during which one or more cyclic redundancy check (CRC) anomalies are declared and/or one or more loss of synchronous word (LOSW) defects are declared.

Usage: This read-only statistic helps monitor interface operations.

Example: `errored-second = 3`

Location: HDSL2- Stat {shelf-N slot-N N} > Physical-Statistic

See Also: Severely-errored-second, Losw-second, unavailable-second

Error-Threshold

Description: Specifies the number of errors that must occur during the error-averaging-period before a modem on this link interface module (LIM) is considered bad.

Usage: Specify a number. The default value is 100.

Example: `error-threshold = 90`

Dependencies: Error-Averaging-Period must be specified appropriately to make Error-Threshold usable.

Location: Lim-Sparing-Config > Auto-Lim-Sparing-Config > Lim-Sparing-Config

Ether-IF-Type

Description: Indicates the type of physical Ethernet interface in use.

Usage: The following are valid values for this read-only parameter:

- `utp`—Indicates unshielded twisted pair (thin Ethernet) as specified in IEEE 802 (10Base5) Ethernet.

- `aui` (Auxiliary Unit Interface)—Indicates a thick Ethernet transceiver as specified in IEEE 802.3 (10BaseT) Ethernet.

- `coax`—Indicates coaxial cable.

Example: `ether-if-type = coax`

Location: Ethernet {shelf-*N* slot-*N N*}

See Also: Enable, Interface-Address, Link-State, Link-State-Enabled, MAC-Address

Ether-Info (profile)

Description: A read-only profile that indicates the MAC address and link state of an Ethernet interface. The Ether-Info profile is created when the Ethernet module enters an active state, and deleted when the slot is brought down. The contents of the profile are not written to NVRAM.

Usage: Use the Read and List commands to make Ether-Info the working profile and list its contents. For example:

```
admin> read ether-info { 1 2 1}
ETHER-INFO/{ shelf-1 slot-2 1 } read

admin> list
[in ETHER-INFO/{ shelf-1 slot-2 1 }]
interface-address*={ shelf-1 slot-2 1 }
mac-address=00:c0:7b:68:ef:98
link-state=up
```

Dependencies: The Ether-Info profile is read only.

See Also: Interface-Address, Link-State, MAC-Address

Ethernet (profile)

Description: A profile that specifies the physical components of a system Ethernet interface.

Usage: To make Ethernet the working profile and list its contents:

```
admin> read ethernet {1 c 1}
ETHERNET/{ shelf-1 controller 1 } read

admin> list
[in ETHERNET/{ shelf-1 controller 1 }]
interface-address*={ shelf-1 controller 1 }
ether-if-type=utp
enabled=yes
```

```
link-state-enabled=no
duplex-mode=full-duplex
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes, execute the Write command. For example:

```
admin> write
ETHERNET/{ shelf-1 controller 1 } written
```

See Also: Duplex-Mode, Ether-IF-Type, Enable, Interface-Address, Link-State-Enabled

Event

Description: Specifies an alarm event that triggers the actions indicated by the Action subprofile.

Usage: Valid values are as follows:

- `power-fail`—Specifies that a redundant power supply fails.

- `fan-fail`—Specifies that a redundant fan fails.

- `line-state-change`—Specifies that the Stinger unit detects a state change in a line.This is the default.

- `slot-state-change`—Specifies that the Stinger unit detects a state change in a slot.

Example: `set event = fan-fail`

Location: Alarm *name*

See Also: Action

Event-Overwrite-Enabled

Description: Specifies whether the system generates a trap when a new event has overwritten an unread event. Once sent, additional overwrites will not cause another trap to be sent until at least one table's worth of new events have occurred.

Usage: Valid values are as follows:

- `Yes`—Specifies that the system generates a trap when a new event has overwritten an unread event. This is the default.

- `No`—Specifies that the system does not generate a trap when a new event has overwritten an unread event.

Example: `set event-overwrite-enabled = no`

Location: Trap *host-name*

Exact-Match-Call-Routing

Description: Specifies whether an exact match of call-route profile parameters when selecting devices is used.

Usage: Specify Yes or No

- If Yes, the system will search for an exact match of call-route profile parameters when selecting devices.
- If No, the system will not search for an exact match of call-route profile parameters when selecting devices.

Example: `exact-match-call-routing = no`

Location: System

See Also: Call-Routing-Sort-Method

Expect-Callback

Description: *Not currently use*d. Specifies whether the Stinger unit expects outgoing calls to result in a call back from the remote device.

Usage: Legal values are

- Yes indicates that the Stinger unit expects the remote device to hang up and call back. Use this setting if Ping or Telnet is in use and the Stinger unit cannot dial back to the calling device.
- No indicates that the Stinger unit does not expect callback.

Example: `expect-callback = no`

Location: Connection station > Telco-Options

See Also: Call-By-Call, Delay-Callback, Transit-Number

Expected-Far-End-IMA-Id

Description: Specifies a number to check against the IMA ID at the far end. If the parameter checkFeImaID is set toYes, then the far-end inverse multiplexing ATM (IMA) ID is compared against this number (the expected-far-end-IMA Id) during group startup, and the group state machine (GSM) moves to ConfigAborted if there is no match.

Usage: Specify a number from 0 (zero) to 255.

Example: `set expected-far-end-ima-id = 33`

Location: IMAGroup > *name*

See Also: Check-Far-End-IMA-Id, Group-Symmetry-Mode, IMA-Id

Extension-Config

Description: Configures a subset of parameters of the ATM-If-Config profile used for connection-setup procedures.

Usage: The following example lists the profile with default values

Example:
```
admin> list extension-config
[in ATM-IF-CONFIG/{ { shelf-1 slot-10 0 } 4 }:extension-config
(new)]
config-type = atmf-uni-pvc-only
config-side = other
ilmi-admin-status = 0
conn-estab-interval = 1
loss-detect-interval = 5
poll-inact-factor = 4
device-type = private
max-switched-vpc-vpi = 255
max-switched-vcc-vpi = 255
min-switched-vcc-vci = 32
sig-vcc-rx-tdesc-index = 2
sig-vcc-tx-tdesc-index = 2
pvc-failure-trap-enabled = no
pvc-failure-intvl = 30
```

External-Auth (profile)

Description: Configures options for an external RADIUS server.

Usage: Use the Read and List commands to make External-Auth the working profile and list its contents. For example:
```
admin> read external-auth
EXTERNAL-AUTH read

admin> list
[in EXTERNAL-AUTH]
auth-type=radius
acct-type=none
rad-auth-client={ 200.168.6.153 0.0.0.0 0.0.0.0 1645 0 +
rad-acct-client={ 0.0.0.0 0.0.0.0 0.0.0.0 0 0 "" 0 0 +
rad-id-source-unique=system-unique
rad-id-space=unified
local-profiles-first=lpf-yes
noattr6-use-termsrv=yes
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:
```
admin> write
EXTERNAL-AUTH written
```

See Also: Acct-Type, Auth-Type, Local-Profiles-First, NoAttr6-Use-Termsrv, Rad-Auth-Client, Rad-ID-Source-Unique, Rad-ID-Space

Ext-Tsrv (profile)

Description: A read-only profile that stores banner and hosts information loaded from RADIUS.

Usage: The `Refresh -t` command requests initial-banner and banner, and hosts information from RADIUS, as two separate requests. This commands independently update the Ext-Tsrv profile. If the information changes the profile contents, the system notifies the slot modules and they update their information.

Use the Read and List commands to make Ext-Tsrv the working profile and list its contents. For example:

```
admin> read ext-tsrv
EXT-TSRV read

admin> list init-banner
[in EXT-TSRV:init-banner]
init-banner[1]=""
init-banner[2]=""
init-banner[3]=""
init-banner[4]=""
init-banner[5]=""
init-banner[6]=""
init-banner[7]=""
init-banner[8]=""
init-banner[9]=""
init-banner[10]=""
init-banner[11]=""
init-banner[12]=""
init-banner[13]=""
init-banner[14]=""
init-banner[15]=""
init-banner[16]=""

admin> list banner
[in EXT-TSRV:banner]
banner[1]=""
banner[2]=""
banner[3]=""
banner[4]=""
banner[5]=""
banner[6]=""
banner[7]=""
banner[8]=""
banner[9]=""
banner[10]=""
banner[11]=""
banner[12]=""
banner[13]=""
banner[14]=""
banner[15]=""
banner[16]=""
```

```
admin> list hosts-info
[in EXT-TSRV:hosts-info]
hosts-info[1]={ 0.0.0.0 "" }
hosts-info[2]={ 0.0.0.0 "" }
hosts-info[3]={ 0.0.0.0 "" }
hosts-info[4]={ 0.0.0.0 "" }
hosts-info[5]={ 0.0.0.0 "" }
hosts-info[6]={ 0.0.0.0 "" }
hosts-info[7]={ 0.0.0.0 "" }
hosts-info[8]={ 0.0.0.0 "" }
hosts-info[9]={ 0.0.0.0 "" }
hosts-info[10]={ 0.0.0.0 "" }
```

See Also: Banner, Hosts-Info N, Init-Banner N

F

Facility

Description: Specifies the Syslog daemon facility code for messages logged from the Stinger unit. For detailed information, see the `syslog.conf` manual page entry on the UNIX Syslog server.

The Facility value in the Log profile affects all data streams. The `facility` value in each Auxiliary-Syslog subprofile affects the individual data stream directed to the device specified by the Host value, and overrides the value in the Log profile.

Usage: Specify one of the following values:

- `local0 (the default)`
- `local1`
- `local2`
- `local3`
- `local4`
- `local5`
- `local6`
- `local7`

Example: `set facility = local0`

Location: Log, Log > Auxiliary-Syslog > Auxiliary-Syslog *N*

See Also: Host, Syslog-Enabled

Failure-Status

Description: Indicates the current failure status of the IMA group (the reason why the group traffic state machine is in the down state).

Usage: The following are valid values.

- `no-failure`—No failure of the IMA group -- unit is up
- `start-up-ne`—IMA group startup failure at the near end
- `start-up-fe`—IMA group startup failure at the far end
- `failed-asymmetric-ne`—IMA group startup failed due to asymmetry at near end
- `failed-asymmetric-fe`—IMA group startup failed due to asymmetry at far end
- `insufficient-links-ne`—IMA group startup failed due to insufficient links at near end
- `insufficient-links-fe`—IMA group startup failed due to insufficient links at far end
- `blocked-ne`—IMA group startup blocked at near en
- `blocked-fe`—IMA group startup blocked at far end
- `other-failure`—IMA group startup has some other failure

- `invalid-ima-version-ne`—Near end reported invalid IMA version

- `invalid-ima-version-fe`—Far end reported invalid IMA version

Example: failure-status = no-failure

Location: IMA-Group-Stat *name*

See Also: Last-Change-Time, Least-Delay-Link, Near-End-IMA-Group-State, Running-Secs

Far-End-CRC

Description: Indicates the number of cyclic redundancy check (CRC) errors detected by the ADSL transceiver unit (ATU) of the customer premise equipment (CPE).

Usage: The Far-End-CRC value is read only.

Example: far-end-crc = 0

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Far-End-FEC, Far-End-HEC

Far-End-dB-Attenuation

Description: Indicates the attenuation of the signal in decibels received from the customer premise equipment (CPE).

Usage: The Far-End-Db-Attenuation setting is read only.

Location: SDSL-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Line-Quality, Line-Up-Timer, Rx-Signal-Present, Self-Test, Up-Down-Cntr

Far-End-FEC

Description: Indicates the number of forward error correction (FEC) errors detected by CPE's ADSL transceiver unit (ATU).

Example: The Far-End-FEC value is read only.

Example: far-end-fec = 0

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Far-End-CRC, Far-End-HEC

Far-End-HEC

Description: Indicates the number of header error checksum (HEC) errors detected by CPE's ADSL transceiver unit (ATU).

Usage: The Far-End-HEC value is read only.

Example: far-end-hec = 0

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Far-End-CRC, Far-End-FEC

Far-End-IMA-Group-State

Description: The current operational state of the far-end inverse multiplexing ATM (IMA) group state machine.

Usage: Valid values areas follows:

- `not-configured`—IMA group is not configured
- `start-up`—IMA group is in the start up state
- `start-up-ack`—IMA group is in a transitional state and has transitioned out of IMA start-up state
- `aborted-unsupported-framelength`—IMA group connection is aborted because the Frame length (M) received from the remote end was not acceptable to local end
- `aborted-incompatible-symmetry`—IMA group connection is aborted because the remote end and local end have incompatible group symmetry modes
- `aborted-other`—IMA group connection is aborted for some other reasons
- `insufficient-links`—IMA group connection is currently in the insufficient links state
- `blocked`—IMA group connection is in the blocked state
- `operational`—IMA group connection is in the operational state
- `aborted-unsupported-version`—Stinger unit moves to the configAborted state because of an IMA version mismatch between the local and remote ends

Example: `far-end-ima-group-state = operational`

Location: IMA-Group-Stat *name*

See Also: Diff-Delay-Max-Obs, Failure-Status, Far-End-Txclock-Mode, Last-Change-Time, Least-Delay-Link, Near-End-IMA-Group-State, Running-Secs, Rx-Avail-Cellrate, Rx-Frame-Length, Rx-Oam-Label-Value

Far-End-Num-Failures

Description: The number of times a far-end group failure (for example, config-aborted or insufficient-links) has been reported in the current 15 minutes interval.

Usage: Valid range is 0 (zero) to 2147483647.

Example: `far-end-num-failures = 6`

Location: IMA-Group-Stat *name* > IMA-Group-Statistic

See Also: Far-End-Num-Failures, Near-End-Num-Failures, Unavailable-Secs

Far-End-Rx-Failure-Status

Description: Indicates the far end receive (RX) failure status of the IMA link.

Usage: Valid values for this read-only parameter are as follows:

- `no-failure`—IMA link does not have any failure
- `ima-link-failure`—IMA link experienced a failure at the IMA layer
- `lif-failure`—IMA link experienced a loss of IMA frame (LIF) failure
- `lods-failure`—IMA link experienced a loss of delay synchronization (LODS) failure
- `misconnected`—IMA link is misconnected to the far-end
- `blocked`—IMA link is in blocked state
- `fault`—IMA link is in fault state
- `far-end-tx-link-unusable`—Far end transmit of the IMA link is in an unusable state
- `far-end-rx-link-unusable`—Far end receive of theIMA link is in an unusable state

Example: `far-end-rx-failure-status = no-failure`

Location: DS1-ATM-Stat { shelf-*N* slot-*N N*} > IMA-Link-Status

See Also: Far-End-Rx-Link-State, Far-End-Tx-Link-State, Far-End-Rx-Failure-Status, Invalid-Intervals

Far-End-Rx-Link-State

Description: Indicates the far-end (rx) receive state of the DS1-ATM link.

Usage: Valid values are as follows:

- `unusable-no-given-reason`—IMA link is not usable but the reason is not known
- `unusable-fault`—IMA link is not usable because of a fault
- `unusable-misconnected`—IMA link is not usable because it is misconnected with the far end
- `unusable-inhibited`—IMA link is not usable because it is in an inhibited state
- `unusable-failed`—IMA link is not usable because it is in failed state
- `usable`— IMA link is usable
- `active`—IMA link is active, part of an IMA group, and carrying traffic from the ATM layer

Example: `far-end-rx-link-state = not-in-group`

Location: DS1-ATM-Stat > { shelf-*N* slot-*N N*} > IMA-Link-Status

See Also: Far-End-Tx-Link-State, Far-End-Rx-Failure-Status, Invalid-Intervals

Far-End-Rx-Num-Failures-Counter

Description: Indicates the number of times a far-end (FE) receive failure alarm condition has been entered on the Rx-Unusable-FE link. This is an optional attribute.

Usage: Valid range is from 0 (zero) to 2147483647

Example: `far-end-rx-num-failures-counter = 0`

Location: DS1-ATM-Stat > { shelf-*N* slot-*N N*} > IMA-Link-Statistic

See Also: Far-End-Sev-Errored-Secs-Counter, Far-End-Rx-Unusable-Secs-Counter, Far-End-Tx-Num-Failures-Counter, Far-End-Tx-Unusable-Secs-Counter, Far-End-Unavail-Secs-Counter, IMA-Violations-Counter Near-End-Rx-Num-Failures-Counter.

Far-End-Rx-Unusable-Secs-Counter

Description: Indicates the count of seconds with receive (rx) unusable indications at the far-end link state machine (LSM).

Usage: Valid range for this read-only parameter is from 0 (zero) to 2147483647.

Example: `far-end-rx-unusable-secs-counter = 134`

Location: DS1-ATM- Stat { shelf-*N* slot-*N N*} > IMA-Link-Statistic

See Also: IMA-Violations-Counter

Far-End-Sev-Errored-Secs-Counter

Description: Indicates the count of one second intervals containing one or more remote defect indicator (RDI) defects in inverse multiplexing ATM (IMA), except during the unavailable seconds for IMA far end (UAS-IMA-FE) condition.

Usage: Valid range for this read-only parameter is from 0 (zero) to 2147483647.

Example: `far-end-sev-errored-secs-counter = 0`

Location: DS1-ATM-Stat > { shelf-*N* slot-*N N*} > IMA-Link-Statistic

See Also: Far-End-Rx-Unusable-Secs-Counter, Far-End-Tx-Num-Failures-Counter, Far-End-Tx-Unusable-Secs-Counter, Far-End-Unavail-Secs-Counter, IMA-Violations-Counter Near-End-Rx-Num-Failures-Counter.

Far-End-Txclock-Mode

Description: Indicates the transmit clocking mode used by the far-end inverse multiplexing ATM (IMA) group.

Usage: Valid values for this read-only parameter are as follows

- `ctc`—Common transmit clock: transmit clocks of the links within IMA group derived from same clock source
- `itc`—Independent transmit clock: transmit clock of the links within IMA group derived from their respective receive clocks

Example: `far-end-txclock-mode = ctc`

Location: IMA-GROUP-Stat *name*

See Also: Diff-Delay-Max-Obs, Failure-Status, Far-End-IMA-Group-State, Last-Change-Time, Least-Delay-Link, Near-End-IMA-Group-State, Running-Secs, Rx-Avail-Cellrate, Rx-Frame-Length

Far-End-Tx-Link-State

Description: Indicates the transmit state of the link.

Usage: Valid values for this read-only parameter are as follows

- `not-in-group`—IMA link is not part of an IMA group
- `unusable-no-given-reason`—IMA link is not usable but the reason is not known
- `unusable-fault`—IMA link is not usable because of a fault
- `unusable-misconnected`—IMA link is not usable because it is misconnected with the far end
- `unusable-inhibited`—IMA link is not usable because it is in an inhibited state
- `unusable-failed`—IMA link is not usable because it is in failed state
- `usable`—IMA link is usable
- `active`—IMA link is active, part of an IMA group, and carrying traffic from the ATM layer

Example: `far-end-tx-link-state = not-in-group`

Location: DS1-ATM- Stat { shelf-*N* slot-*N N*} > IMA-Link-Status

Usage: Far-End-Rx-Failure-Status, Far-End-Rx-Link-State, Invalid-Intervals, Near-End-Rx-Failure-Status, Near-End-Rx-Link-State, Near-End-Tx-Link-State

Far-End-Tx-Num-Failures-Counter

Description: Indicates the number of times a far-end (FE) transmit (tx) failure alarm condition has been entered on the Tx-Unusable-FE link. This is an optional attribute.

Usage: Valid range for this read-only parameter is from 0 (zero) to 2147483647.

Example: `far-end-tx-num-failures-counter = 12`

Location: DS1-ATM- Stat { shelf-*N* slot-*N N*} > IMA-Link-Statistic

See Also: IMA-Violations-Counter

Far-End-Tx-Unusable-Secs-Counter

Description: Indicates the count of seconds with Tx Unusable indications from the far-end Tx link state machine (LSM).

Usage: Valid range for this read-only parameter is from 0 (zero) to 2147483647.

Example: `far-end-tx-unusable-secs-counter = 0`

Location: DS1-ATM- Stat { shelf-*N* slot-*N N*} > IMA-Link-Statistic

See Also: Elapsed-Seconds

Far-End-Unavail-Secs-Counter

Description: Indicates the count of unavailable seconds at the far end. Unavailability begins at the onset of 10 contiguous severely errored seconds for inverse multiplexing ATM (SES-IMA-FE) and ends at the onset of 10 contiguous seconds with no SES-IMA-FE.

Usage: Valid range for this read-only parameter is from 0 (zero) to 2147483647.

Example: `far-end-unavail-secs-counter = 0`

Location: DS1-ATM- Stat { shelf-*N* slot-*N N*} > IMA-Link-Statistic

See Also: IMA-Violations-Counter

Fast-Path-Config

Description: A subprofile that configures minimum, maximum, and planned upstream and downstream bit rates for a rate-adaptive connection on a fast channel.

Usage: With AL-DMT as the working profile, list the Fast-Path-Config subprofile. For example:

```
admin> list fast-path-config
[in AL-DMT/{ shelf-1 slot-4 1 }:fast-path-config]
min-bitrate-up=10
min-bitrate-down=50
max-bitrate-up=1000
max-bitrate-down=8000
planned-bitrate-up=200
planned-bitrate-down=1000
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: AL-DMT {shelf-*N* slot-*N N*}

See Also: Max-Bitrate-Down, Max-Bitrate-Up, Min-Bitrate-Down, Min-Bitrate-Up, Planned-Bitrate-Down, Planned-Bitrate-Up

Fault-Clearing-Time

Description: *Not currently used.* Specifies the amount of time in seconds after which fault is cleared if fault-clearing-type is set to auto.

Example: Valid range is 0 (zero) to 2147483647.

Example: `fault-clearing-time = 10`

Location: DS1-ATM { shelf-*N* slot-*N N*} > Line-Config > IMA-Option-Config

See Also: Add-Link-Cond-Time, Fault-Clearing-Type, Ne-Tx-Lid

Fault-Clearing-Type

Description: *Not currently used.* Specifies whether fault clearing is automatic or manual.

Usage: Valid values are

- `manual`—Link fault clearing type is manual; any fault is permanent until cleared by user
- `auto`— Link fault clearing type is automatic; a fault is automatically cleared after the user-defined time. This is the default.

Example: `fault-clearing-type = auto`

Location: DS1-ATM { shelf-*N* slot-*N N*} > Line-Config > IMA-Option-Config

See Also: Add-Link-Cond-Time, Fault-Clearing-Type, Ne-Tx-Lid

F-Bit-Error-Count

Description: Indicates the number of framing bit errors received since the last time the unit was reset.

Usage: This read-only display is used for monitoring line communications. If three or more errors occur in up to 16 consecutive framing bits in a DS3 M-frame, a DS3 out-of-frame defect is detected. If an out-of-frame defect is consistent for up to 10 seconds, a DS3 loss-of-frame detect is detected.

Example: `f-bit-error-count = 0`

Location: DS3-ATM-Stat {shelf-*N* slot-*N N*}

See Also: AIS-Receive, BPV-Error-Count, CP-Bit-Error-Count, F-Bit-Error-Countt, Line-State, Loss-of-Frame, Loss-of-Signal, P-Bit-Error-Count, Yellow-Receive

FBM-DBM-Mode

Description: Specifies whether the line is in fixed-bit-map (FBM) or dual-bit-map (DBM) mode. Only relevant for Annex-C modules.

Usage: Specify either fbm (the default) or dbm.

Example: `set fbm-dbm-mode = dbm`

Location: AL-DMT

See Also: Bit-Swapping

Fclloc-Gauge

Description: Specifies the gauge of the cable in the loop of a copper loop test (CLT).

Usage: Valid values are as follows:

- 22, 24 or 26 AWG—If you have selected English units.
- 4, 5, or 6 tenths of a millimeter—If you have selected metric units.

Example: When metric units have been selected.

```
fclloc-guage = 4
```

Dependencies: You must specify the appropriate unit of measurement in Fclloc-Unit.

Location: CLT-Command

See Also: CLTcmd, CLT-Result (profile), Fclloc-Unit, Shortloc-Type, Shortloc-Unit, Test-Operation

Fclloc-Unit

Description: Specifies the units of measurement used for a first coil location test in a copper loop test (CLT).

Usage: Valid values are as follows:

- english—Specifies that english units are used for the measurement.
- metric—Specifies that metric units are used for the measurement.

Example: fclloc-unit = metric

Location: CLT-Command

See Also: CLTcmd, CLT-Result (profile), Fclloc-Gauge, Shortloc-Type, Shortloc-Unit, Test-Operation

FEB-Error-Count

Description: Indicates the number of far-end block errors (C-bit coding violations) received since the last time the unit was reset.

Usage: The FEB-Error-Count value is read only.

Example: `feb-error-count = 0`

Location: DS3-ATM-Stat {shelf-*N* slot-*N N*}

See Also: AIS-Receive, BPV-Error-Count, CP-Bit-Error-Count, F-Bit-Error-Count, Line-State, Loss-of-Frame, Loss-of-Signal, P-Bit-Error-Count, Yellow-Receive

FIFO-Overflow-Counter

Description: Indicates the number of cells dropped due to first-in-first-out (FIFO) overflow.

Usage: The FIFO-Overflow-Counter value is read only.

Example: `fifo-overflow-counter = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: HEC-Cell-Drop-Counter

Filter-Name

Description: Specifies the name of a Filter profile. In a Filter profile, the name you assign becomes the Filter profile's index. In an Ethernet profile, the name specifies the data filter that the Stinger unit applies to the Ethernet interface.

Usage: Specify a filter name of up to 16 characters. The default is null.

Example: `filter-name = ip-spoof`

Location: Ethernet {shelf-N slot-N N}, Filter filter-name

See Also: Call-Filter, Data-Filter, Filter-Persistence

Filter-Persistence

Description: Specifies whether filters persist across state changes. A state change occurs when a connection is temporarily disconnected because of inactivity on the line.

Usage: Valid values are as follows:

- `Yes`—Specifies that filters persist across state changes.
- `No`—Specifies that filters do not persist across state changes. This is the default.

Example: `filter-persistence = yes`

Location: Answer-Defaults > Session-Info, Connection station > Session-Options

See Also: Call-Filter, Data-Filter, Filter, Filter-Name, Session-Info, Session-Options

Firmware-Startup-Stage

Description: Indicates the current firmware state.

Usage: The Firmware-Startup-Stage value is read only.

Example: `firmware-startup-stage = idle`

Location: SDSL-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Far-End-dB-Attenuation, Line-Quality, Line-Up-Timer, RX-Signal-Present, Self-Test, Up-Down-Cntr

Firmware-Ver

Description: Indicates the version number of the Line Interface Module (LIM) firmware.

Usage: The Firmware-Ver value is read only.

Example: `firmware-ver = 1.4.1`

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Status

First-Coil-Location

Description: Specifies the distance to the first load coil detected in a copper loop test (CLT).

Usage: Distance is reported in centimeters if Fclloc-Unit is set to metric. Distance is reported in hundredths of feet if Fclloc-Unit is set to English. A value of 0 indicates no load coil detected.

Example: `first-coil-location  =  74`

Location: CLT-Result

See Also: CLTcmd, CLT-Command (profile), Short-Location, Voice-Detection

Flow-Control

Description: Specifies the flow control method used on the serial port.

Usage: Valid values are as follows:

Usage: Specify one of the following values:

- `none`—This is the default.
- `xon-xoff`
- `hardware-handshake`

Example: `set flow-control = xon-xoff`

Location: Serial {shelf-*N* slot-*N N*}

See Also: Serial (profile)

Force-56Kbps

Description: Specifies whether the Stinger unit uses only the 56Kbps portion of a channel, even when all 64Kbps appear to be available. You need not set this value for calls within North America.

Usage: Valid values are as follows:

Usage: Specify Yes or No. The default is No.

- Yes—Specifies that the Stinger unit uses only the 56Kbps portion of a channel.
- No—Specifies that the Stinger unit uses the full 64Kbps bandwidth, if it is available. This is the default.

Example: `set force-56kbps = yes`

Location: Answer-Defaults, Connection *station* > Telco-Options

See Also: Force-56Kbps, Telco-Options

FR-08-Mode

Description: Specifies how Frame Relay packet headers are processed when they flow between the Frame relay interface and the Asynchronous Transfer Mode (ATM) interface.

Usage: Valid values are as follows:

- translation— RFC 1490 headers are converted to RFC1483 header format. This is the default.
- transparent—RFC 1490 headers are not converted to RFC 1490 header format.

   Note: This parameter is not currently used in the ATM-connect-options subprofile.

Example: fr-08-mode = translation

Location: Connection *station* > ATM-Options

See Also: SPVC-Retry-Limit, VC-Max-Loopback-Cell-Loss

Framed-Only

Description: Specifies whether an incoming call must use a framed protocol or not.

Usage: Valid values are as follows:

- Yes—Specifies that an incoming call must use a framed protocol.
- No—Specifies that an incoming call need not use a framed protocol. This is the default.

Example: `set framed-only = yes`

Location: Connection *station*

See Also: Encapsulation-Protocol

Frame-Length

Description: Specifies the frame length for the IMA group.

Usage: Valid values are as follows:

- `32`—IMA frame is 32 cells long.
- `64`—IMA frame is 64 cells long.
- `128`—IMA frame is 128 cells long. This is the default.
- `256`—IMA frame is 256 cells long.

Example: `set frame-length = 64`

Location: IMAGroup *name*

See Also: Expected-Far-End-IMA-Id, Group-Symmetry-Mode

Frame-Relay (profile)

Description: Configures integrated digital services line (IDSL) ports.

Usage: Following is a listing of the profile with default values.

```
admin> list

[in FRAME-RELAY/""]
fr-name* = ""
active = no
nailed-up-group = 1
nailed-mode = ft1
called-number-type = 2
switched-call-type = 56k-clear
phone-number = ""
billing-number = ""
transit-number = ""
call-by-call-id = 0
link-mgmt = none
link-type = dte
n391-val = 6
n392-val = 3
n393-val = 4
t391-val = 10
t392-val = 15
MRU = 1532
dceN392-val = 3
dceN393-val = 4
link-mgmt-dlci = dlci0
mfr-bundle-name = ""
frf5-options = { no 0 35 16 }
```

Frame-Relay-Options

Description: A subprofile that configures the options to match the Frame Relay profile when configuring an IDSL-to-Frame Relay connection.

Usage: Following is an example of a Frame-Relay-Options subprofile

```
Admin> list
[in CONNECTION/""]frame-relay-profile = ""
dlci = 16
circuit-name = ""
fr-link-type = transparent-link
fr-direct-enabled = no
fr-direct-profile = ""
fr-direct-dlci = 16
mfr-bundle-name = ""
fr-enabled = yes
fill-1 = 0
```

Framer-Mode

Description: Specifies the DS3 Asynchronous Transfer Mode (ATM) framer mode.

Usage: Valid values are as follows:

- `C-Bit-ADM`— Free-running and fixed-stuffing C-Bit-ADM mode.
- `C-Bit-PLCP`—Free-running and fixed-stuffing C-Bit-PLCP mode.This is the default.
- `C-Bit-ADM-Loop-Timed`—Loop-timed C-Bit-ADM mode.
- `C-Bit-PLCP-Loop-Timed`—Loop-timed C-Bit-PLCP mode.
- `C-Bit-ADM-Frame-Locked`—Frame-locked C-Bit-ADM mode.
- `C-Bit-PLCP-Frame-Locked`—Frame-locked C-Bit-PLCP mode.

Example: `set framer-mode = c-bit-plcp-frame-locked`

Location: DS3-ATM {shelf-*N* shelf-*N N*} > Line-Config, OC3-ATM {shelf-*N* shelf-*N N*} > Line-Config

See Also: Framer-Rate

Framer-Rate

Description: Specifies the framing to use on the line.

Usage: Currently, the only supported value is STS-3C, which is used for a 155.52-Mbps interface in the U.S. as well as the equivalent European 155 Mbps interface (STM-1).

Location: OC3-ATM {shelf-*N* trunk-module-*N N*} > Line-Config

See Also: Framer-Mode

Framer-Sync-Status

Description: Indicates the state of the HDSL2 framer. Provides troubleshooting information and can assist in determining the reason for a loss of signal (LOS) condition.

Usage: Valid values for this read-only parameter are as follows:

- in-sync—Framer is in sync. The HDSL2 framers are successfully passing HDSL2 frames.
- resync-state 1—Resync-state 1 - 5 indicate that the HDSL2 framer is trying to regain synchronization.
- resync-state 2—Indicates that the HDSL2 framer is trying to regain synchronization.
- resync-state 3—Indicates that the HDSL2 framer is trying to regain synchronization.
- resync-state 4—Indicates that the HDSL2 framer is trying to regain synchronization.
- resync-state 4—Indicates that the HDSL2 framer is trying to regain synchronization.
- out-of-sync—HDSL2 framer is out of synchronization and is not trying to regain sync.
- out-of-sync-pre-sync—HDSL2 framer is out of synchronization and is not trying to gain sync.

Example: framer-sync-status = in-sync

Location: HDSL2- Stat { shelf-*N* slot-*N N* } > Physical-Statistic

See Also: Framer-Rate

Frame-Type

Description: *Not currently used.* Specifies the super-framing mode used for the physical link(s).

Usage: When this parameter becomes available, you will be able to specify one of the following values:

Usage: Valid values are

- d4—Fourth generation channel bank
- esf—Extended Super Frame format, a T1 format that uses the framing bit for non-intrusive signaling and control. This is the default.
- 703

Example: frame-type = esfg

Location: DS1-ATM { shelf-*N* slot-*N N*} > Line-Config

See Also: Encoding, Loopback, Nailed-group, Pcm-Mode

FR-Answer

Description: Specifies whether the Stinger unit answers incoming connections that use Frame Relay encapsulation.

Usage: Valid values are as follows:

- `Yes`—Specifies that the Stinger unit answers incoming connections that use Frame Relay encapsulation. This is the default.

- `No`—Specifies that this function is disabled.

Example: `fr-answer = yes`

Location: Answer-Defaults

See Also: Enable

FR-Direct-DLCI

Description: *Not currently used.* The data link connection identifier (DLCI) of the frame relay direct connection.

Usage: When this parameter becomes available, you will be able to specify a number from 16 to 91.

Example: `fr-dlci = 16`

Dependencies: m

Location: Connection *name* > Fr-Options

FR-Direct-Enabled

Description: *Not currently used.* Specifies that the Stinger unit uses the connection for Frame Relay Direct.

Usage: When this parameter becomes available, you will be able to specify one of the following values:

- `Yes`—Specifies that the Stinger unit uses the connection for Frame Relay Direct.

- `No`—Specifies that the Stinger unit does not use the connection for Frame Relay Direct. This is the default

Example: `set fr-direct-enabled = yes`

Dependencies: If Encapsulation-Protocol=Frame-Relay or Frame-Relay-Circuit, FR-Direct-Enabled does not apply.

Location: Connection *station* > FR-Options

See Also: Encapsulation-Protocol, FR-DLCI, G, FR-Profile

FR-Direct-Profile

Description: *Not currently used.* Specifies the name of the frame relay profile that will be used forframe-relay-direct routing

Usage: When this parameter becomes available, you will be able to specifiy a name of up to 16 characters.

Example: `set fr-direct-profile = cingula`

Location: Connection *name* > Fr-Options

Frdl

Description: Specifies the password for the Frame Relay pseudo user.

Usage: Specify a password of up to 21 characters.

Example: `frdl = yourpass`

Location: External-Auth > Password-Profile

See Also: Frame-Relay (profile)

FR-DLCI

Description: Specifies a Frame Relay data link connection identifier (DLCI) number to use for Frame Relay Direct connections.

Usage: Specify the DLCI obtained from the Frame Relay administrator for Frame Relay direct links. The default is null. More than one direct PPP connection can share an FR-DLCI number.

Example: `set fr-dlci = 72`

Dependencies: Consider the following:

- If `FR-Direct-Enabled=No`, FR-DLCI does not apply. FR-DLCI does not apply to gateway or circuit connections.
- The T1 Frameline (UT1) module supports a maximum of 240 active DLCIs.
- The SWAN module supports a maximum of 120 active DLCIs.

Location: Connection *station* > FR-Options

See Also: Encapsulation-Protocol, FR-Direct-Enabled, G, FR-Profile

Frdlci-Stat (profile)

Description: This read-only profile indicates the state of the Frame Relay data link connection identifier for the permanent virtual channel (DLCI-PVC).

Usage: Use the Dir, Read and List commands to make this the current profile, as in this example:

Example:

```
techpubs> dir frdlc
0  11/01/2000 17:03:20  { 16 3 fr13_20_1 transparent-link }
techpubs> read frdlc { 16 3 fr13_20_1 transparent-link }
FRDLCI-STAT/{ 16 3 fr13_20_1 transparent-link } read
techpubs> list
[in FRDLCI-STAT/{ 16 3 fr13_20_1 transparent-link }]
dlci-ident* = { 16 3 fr13_20_1 transparent-link }
circuit-name = 801_0_120
```

```
current-state = pvc-data-transfer
tag = 4225504
shelf-number = shelf-1
slot-number = slot-13
techpubs> list dlci-ident
[in FRDLCI-STAT/{ 16 3 fr13_20_1 transparent-link }:dlci-ident]
dlci = 16
dlci-route-id = 3
fr-profile = fr13_20_1
fr-link-type = transparent-link
```

Frequency-Justification-Count

Description: Indicates the count of frequency justification instances that have taken place. These operations monitor and reinforce synchronicity in the sending of packets.

Usage: The Frequency-Justification-Count value is read only.

Example: `frequency-justification-count = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: FIFO-Overflow-Counter, HEC-Cell-Drop-Counter, Interval-Performance-Monitoring

FR-LinkDown-Enabled

Description: Specifies whether a trap (notification) is sent whenever a data link connection identifier (DLCI) is brought down.

Usage: Valid values are as follows:

- Yes specifies that a trap is sent whenever a DLCI is brought down. This is the default.
- No specifies that a trap is not sent whenever a DLCI is brought down.

Example: set fr-linkdown-enabled = no

Dependencies: If you set `FR-LinkDown-Enabled=Yes`, you must also set `Alarm-Enabled=Yes` for a trap to be sent whenever a DLCI is brought down.

Location: Trap *host-name*

See Also: Alarm-Enabled, G

FR-Link-Type

Description: *Not currently use*d. Specifies the type of link for the circuit endpoint.

Usage: When this parameter becomes available, you will be able to specify one of the following values:

- `transparent-link`—Specifies a 1:1 circuit. It requires two end points that specify the same circuit name and the transparent-link type. If only one end point is specified, data received on the specified DLCI is dropped. If more than two transparent-link endpoints

are specified with the same circuit name, only two of the profiles will be used to form a circuit. This is the default.

- `host-link`—Specifies virtual channel trunking with multiple end points on the host side.

- `trunk-link`—Specifies virtual channel trunking with a single end point on the trunk side.

Example: `fr-link-type = transparent-link`

Location: Connection *station* > Fr-Options

See Also: FR-Link-Type, Fr-Link-Type, FR-Direct-Profile, FR-Direct-Profile, FR-Direct-DLCI, MFR-Bundle-Name

FR-LinkUp-Enabled

Description: Specifies whether a trap (notification) is sent whenever a data link connection identifier (DLCI) is brought up.

Usage: Valid values are as follows:

- `Yes`—Specifies that a trap is sent whenever a DLCI is brought up. This is the default.

- `No`—Specifies that a trap is not sent whenever a DLCI is brought up.

Example: set fr-linkup-enabled = no

Dependencies: If you set `FR-LinkUp-Enabled=Yes`, you must also set `Alarm-Enabled=Yes` for a trap to be sent whenever a DLCI is brought up.

Location: Trap *host-name*

See Also: Alarm-Enabled, FR-LinkDown-Enabled

FR-Name

Description: Specifies the name of a Frame-Relay profile.

Usage: Specify a name for the profile. The name must be unique and cannot exceed 15 characters. The default is null.

Example: set fr-name = att-dce

Location: Frame-Relay *fr-name*

See Also: Frame-Relay (profile)

Front-End-Type

Description: Specifies the front end type of the transceiver: a long-haul or short-haul line interface unit.

Usage: Valid values are as follows:

Usage: Specify one of the following values:

- short-haul—Sets the port for short-haul mode. Sets the receive sensitivity to -12dB in E1 mode and -30dB in T1 mode. For this setting to apply, you must also set the Line-Length parameter to the length of the cable that connects to the digital cross-connect. This is the default.

- long-haul—Sets the port to the long-haul mode. Sets the receive sensitivity on the interface to -43dB in E1 mode and -36dB in T1 mode. You must also specify the correct value for the Line-Build-Out parameter for this setting to apply. Note that the long-haul setting requires 120-ohm termination.

Example: `front-end-type = short-haul`

Location: DS1-ATM { shelf-N slot-N N } > Line-Config

See Also: Front-End-Type, Line-Build-Out, Line-Length

FR-Options

Description: A subprofile that configures Frame Relay connections.

Usage: With a Connection profile as the working profile, list the FR-Options subprofile. For example:

```
admin> list fr-options
[in CONNECTION/tim:fr-options]
frame-relay-profile=""
dlci=16
circuit-name=""
fr-direct-enabled=no
fr-profile=""
fr-dlci=16
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Dependencies: Frame Relay calls must be enabled in the Answer-Defaults profile.

Location: Connection *station*

See Also: Circuit-Name, DLCI, FR-Link-Type, Fr-Link-Type, FR-Direct-Profile, FR-Direct-Profile, FR-Direct-DLCI, MFR-Bundle-Name

FR-Profile

Description: Specifies the name of the Frame-Relay profile to use for a Frame Relay direct connection.

Usage: Specify the name of a configured Frame-Relay profile, exactly as specified by the Fr-Name setting, including case changes.

Example: `set fr-profile = att-dce`

Dependencies: For FR-Profile to apply, you must set FR-Direct-Enabled=Yes. FR-Profile does not apply to gateway or circuit connections.

Location: Connection *station* > FR-Options

See Also: Encapsulation-Protocol, FR-Direct-Enabled, FR-DLCI, FR-Options

FrPVC-Stat (profile)

Description: This profile displays the state of the Frame Relay permanent virtual connection.

Usage: Use the Dir, Read, and List commands to make this the current profile, as in this example:

```
techpubs> dir frpvc-stat
0  11/01/2000 17:03:32  801_0_120
techpubs> read frpvc  801_0_120
FRPVC-STAT/801_0_120 read
techpubs> list
[in FRPVC-STAT/801_0_120]
circuit-name* = 801_0_120
current-state = pvc-data-transfer
transparentPvc = yes
trunkLinkIndex = 0
activeLinkCount = 3
dlci-members = [ { 16 3 fr13_20_1 transparent-link } { 17 4 fr13_20_2
transpare+
techpubs> list dlci-m 1
[in FRPVC-STAT/801_0_120:dlci-members[1]]
dlci = 16
dlci-route-id = 3
fr-profile = fr13_20_1
fr-link-type = transparent-link
```

G

Gain-Default

Description: Specifies the default gain value in decibels (dB) for automatic gain control (AGC), either (16dB or 20dB).

Usage: The optimum value for downstream transmission is 20dB. The optimum for upstream transmission is 16dB.

Example: `set gain-default = 20`

Location: AL-DMT { any-shelf any-slot *N* } > Fast-Path-Config

See Also: Max-Aggr-Power-Level-Down, Max-Aggr-Power-Level-Up, Max-Power-Spectral-Density

Gamma-IMA-Value

Description: Used for inverse multiplexing ATM (IMA). The gamma value used to specify the number of consecutive valid IMA Control Protocol (ICP) cells to be detected before moving to IMA SYNC state from the PRESYNC state.

Usage: Specify a number from 1 to 5.

Example: `set gamma-ima-value = 1`

Location: IMAhw-config { shelf-*N* slot-*N N*}]

See Also: Alpha-Cell-Delin-Value, Alpha-IMA-Value, Beta-IMA-Value, Delta-Cell-Delin-Value, Gamma-IMA-Value

Gateway-Address

Description: Specifies the address of the next-hop router the Stinger unit uses to reach the destination address specified by a static route. A next-hop router is directly connected to the Stinger unit on the Ethernet or is one hop away on a WAN link.

Usage: Specify the IP address of the router the Stinger unit uses to reach the target host for the route. The default is 0.0.0.0.

Example: `set gateway-address = 10.207.23.1`

Location: IP-Route *name*

See Also: Active-Route, Dest-Address, Metric, Preference, Private-Route

Glite-ATM-48

Description: Specifies whether code images for ADSL 48-Port G.lite Line Interface Modules (LIMs) should be stored in Flash memory.

Usage: Valid values are as follows:

- `Auto`—Causes the system to load images for modules that are installed in the Stinger unit, and to skip images for modules that are not installed. This is the default.
- `Load`—Causes the system to load the image, even if there is no module of that type installed.
- `Skip`—Causes the system to skip the image, even if there is a module of that type installed.

Example: `set glite-atm-48 = auto`

Location: Load-Select

See Also: 48-DMT-ADSL

Global

Description: *Not currently used.* Specifies a number from 0 to 104 that represents the highest level of the Private Network-to-Network Interface (PNNI) hierarchy that lies within the global scope. The default value is 0.

Location: PNNI-Node-Config *N* > Node-Scope-Mapping

GMT-Offset

Description: Specifies your time zone as an offset from Coordinated Universal Time (UTC). The GMT-Offset setting enables the Stinger unit to update its system time from an SNTP server.

UTC is in the same time zone as Greenwich Mean Time (GMT), and the offset is specified in hours, using a 24-hour clock. Because some time zones, such as Newfoundland, cannot use an even-hour boundary, the offset includes 4 digits and is specified in half-hour increments. For example, in Newfoundland the time is 1.5 hours ahead of UTC, so GMT-Offset is represented as follows:

UTC+0130

For San Francisco, which is 8 hours ahead of UTC:

UTC+0800

For Frankfurt, which is 1 hour behind UTC:

UTC-0100

Usage: The default is utc+0000Specify one of the following values to represent your time zone:

utc-1130
utc-1100
utc-1030

```
utc-1000
utc-0930
utc-0900
utc-0830
utc-0800
utc-0730
utc-0700
utc-0630
utc-0600
utc-0530
utc-0500
utc-0430
utc-0400
utc-0330
utc-0300
utc-0230
utc-0200
utc-0130
utc-0100
utc-0030
utc+0000
utc+0030
utc+0100
utc+0130
utc+0200
utc+0230
utc+0300
utc+0330
utc+0400
utc+0430
utc+0500
utc+0530
utc+0600
utc+0630
utc+0700
utc+0730
utc+0800
utc+0830
utc+0900
utc+0930
utc+1000
utc+1030
utc+1100
utc+1130
utc+1200
```

Example: `set gmt-offset = utc+0800`

Location: IP-Global > SNTP-Info

See Also: Enabled, Host, SNTP-Info

Group-Symmetry-Mode

Description: Specifies the symmetry mode of the inverse multiplexing ATM (IMA) group to which this link belongs.

Usage: Currently `symmetric-operation` is the only value for this parameter supported. `symmetric operation` entails symmetrical configuration and operation. An IMA link must be configured for each direction of all the physical links to be used, and the IMA unit is only allowed to transmit and receive ATM layer cells over the physical links on which IMA links running in both directions are Active.

Example: `group-symmetry-mode = symmetric-operation`

Location: IMAGroup *name*

See Also: Check-Far-End-IMA-Id, Expected-Far-End-IMA-Id, IMA-Id, Rx-Num-Config-Links

H

Hardware-Level

Description: Indicates a one- or two-character string representing the hardware revision level of the module.

Usage: The Hardware-Level setting is read only. A value of 0 (zero) means that the revision level is unknown.

Example: `hardware-level = 0`

Location: Base, Slot-Info {shelf-*N* slot-*N N*}

See Also: Software-Level

Hardware-Revision

Description: Indicates the level of revision for test head hardware in the copper loop test (CLT).

Usage: Read-only value

Example: `hardware-revision = 0`

Location: CLT-Result

See Also: Software-Revision

Hardware-Rework-Count

Description: Indicates the number of times the module has been reworked.

Usage: The Hardware-Rework-Count setting is read only.

Location: Slot-Info {shelf-*N* slot-*N N*}

See Also: Hardware-Level

Hardware-Ver

Description: Indicates the hardware version of the line interface module (LIM) or of the ADSL modem.

Usage: The Hardware-Ver setting is read only.

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Status,
SDSL-Stat {shelf-*N* slot-*N N*} > Physical-Status

See Also: Major-Firmware-Ver, Minor-Firmware-Ver

HDSL2

Description: Specifies whether code images for HDSL2 32-Port line interface modules (LIMs) should be stored in Flash memory.

Usage: Valid values are as follows:

- `auto`—Load code image if there is a module installed of that type. Otherwise, skip it. This is the default.
- `load`—Load code image when present in tar file
- `skip`—Skip code image when present in tar file

Example: `hdsl2 = auto`

Location: Load-Select

See Also: HDSL2 (profile), Load-Select (profile)

HDSL2 (profile)

Description: Configures HDLS2 ports.

Usage: The parameters are shown with example values.

```
admin> read hdsl2 { 1 2 1 }
HDSL2/{ shelf-1 slot-2 1 } read
admin> list
[in HDSL2/{ shelf-1 slot-2 1 }]
name = 1:2:1
physical-address* = { shelf-1 slot-2 1 }
enabled = no
sparing-mode = inactive
line-config = { 0 51 15 static { any-shelf any-slot 0 } coe }

admin> list line
[in HDSL2/{ shelf-1 slot-2 1 }:line-config]
trunk-group = 0
nailed-group = 51
vp-switching-vpi = 15
activation = static
call-route-info = { any-shelf any-slot 0 }
unit-type = co
entr-enable = no
clock-source = not-eligible
clock-priority = middle-priority
```

HDSL2-Stat (profile)

Description: Indicates the status of each HDSL2 interface. The Stinger creates an HDSL2-Stat profile for each HDSL2 interface in the system.

Usage: The HDSL2 parameters are as follows, shown with sample settings for an active line:

```
[in HDSL2-STAT/{ shelf-1 slot-2 10 }]
physical-address* = { shelf-1 slot-2 10 }
line-state = active
spare-physical-address = { any-shelf any-slot 0 }
sparing-state = sparing-none
sparing-change-reason = unknown
sparing-change-time = 0
sparing-change-counter = 0
vpi-vci-range = vpi-0-15-vci-32-127
vp-switching-vpi = 15
physical-status = { 0 cpe port-up 1544000 A100 1 }
physical-statistic = { { 0 0 3 } yes 36 3 passed 10 0 in-sync 0 0 0 0 0
0 0 no+
```

HEC-Cell-Drop-Counter

Description: Indicates the number of cells dropped by HEC processing.

Usage: The HEC-Cell-Drop-Counter value is read only.

Example: `hec-cell-drop-counter = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: FIFO-Overflow-Counter

HEC-Correction-Enabled

Description: *Not currently used.* Specifies whether correction of cells received with a single-bit error in the header error check (HEC) is enabled.

Usage: When this parameter becomes available, you will be able to specify one of the following values:

- `Yes`—Specifies that correction of cells received with a single-bit error in the HEC is enabled.
- `No`—Specifies that correction of cells received with a single-bit error in the HEC is disabled. This is the default.

Example: `hec-correction-enabled = no`

Location: DS1-ATM { shelf-*N* slot-*N N*} > Line-Config

See Also: Coset-Enabled, Encoding, Frame-Type, Front-End-Type, IMA-Option-Config, PCM-Mode, Scrambling-Enabled

Hello-Holddown

Description: Specifies the Initial value in 100-millisecond units for the Hello hold-down timer used by the node to limit the rate at which it sends Hello packets.

Usage: The value must be a positive non-zero number.

Example: set hello-holddown = 10

Location: PNNI-Node-Config *N* > Node-timer

See Also: Avcr-Pm, Cdv-Pm, Hello-Inactivity-Factor, Hello-Interval, Hlink-Inact, Peer-Delayed-Ack-Interval, PTSE-Holddown, PTSE-Lifetime-Factor, PTSE-Refresh-Interval, Rxmt-Interval

Hello-Inactivity-Factor

Description: Specifies the inactivity factor the node uses to determine when a neighbor has gone down.

Usage: Specify a number to designate neighbor inactivity. The default is 10.

Example: set Hello-Inactivity-Factor = 5

Location: PNNI-Node-Config *N* > Node-timer

See Also: Avcr-Pm, Cdv-Pm, Hello-Interval, Hlink-Inact, Peer-Delayed-Ack-Interval, PTSE-Holddown, PTSE-Lifetime-Factor, PTSE-Refresh-Interval, Rxmt-Interval

Hello-Interval

Description: Initial value in seconds for the Hello Timer. In the absence of triggered Hellos, the node sends one Hello packet on each of its ports on this interval. Its value must be a positive non-zero number.

Usage: Its value must be a positive non-zero number. The default is 15.

Example: set hello-interval = 10

Location: PNNI-Node-Config *N* > Node-timer

See Also: Avcr-Pm, Cdv-Pm, Hello-Inactivity-Factor, Hlink-Inact, Peer-Delayed-Ack-Interval, PTSE-Holddown, PTSE-Lifetime-Factor, PTSE-Refresh-Interval, Rxmt-Interval

High-Priority-Weight

Description: Specifies the weight of a queue on the high-priority scheduler. The relative weight determines how much of the scheduler's work cycle this queue can receive relative to other queues on the same scheduler.

Usage: Range is 0 to 15. The total weight per scheduler must be less than or equal to 128. The high-priority weight or low-priority weight must be nonzero if the queue is active.

Example: set high-priority-weight = 12

Location: Controller-Static-Config > Atm-Parameters > Outgoing-Queue

See Also: CBR, Low-Priority-Weight, UBR

High-Speed-Slot-Static-Config (profile)

Description: Configures Auxiliary parameters for each high-speed slot.

Usage: Use the Dir, Read and List commands to make this the current profile, as in this example:

```
techpubs> dir high-speed
15  10/31/2000 18:10:48  { shelf-1 trunk-module-1 1 }  ""
techpubs> read high-speed  { shelf-1 trunk-module-1 1 }
HIGH-SPEED-SLOT-STATIC-CONFIG/{ shelf-1 trunk-module-1 1 } read
techpubs> list
[in HIGH-SPEED-SLOT-STATIC-CONFIG/{ shelf-1 trunk-module-1 1 }]
name = ""
physical-address* = { shelf-1 trunk-module-1 1 }
atm-parameters = { low-priority }
```

High-Tx-Output

Description: Enable/disable high transmit output. Specifies whether the DS3 cable length is more than 255 feet.

Usage: Valid values are as follows:

- Yes—Specifies that the DS3 cable length is more than 255 feet.
- No—Specifies that the DS3 cable length is less than 255 feet. This is the default.

For cables longer than 255 feet, set to Yes.

Example: set high-tx-output = yes

Location: DS3-ATM {shelf-*N* slot-*N N*} > Line-Config

See Also: Cell-Payload-Scramble, Framer-Mode

Hlink-Inact

Description: Specifies the number of seconds the node continues to advertise a horizontal link for which it has not received and processed a logical group node (LGN) horizontal link group.

Usage: Specify the number of seconds.The default is 120.

Example: set hlink-inact = 100

Location: PNNI-Node-Config *N* > Node-timer

See Also: Avcr-Pm, Cdv-Pm, Hello-Inactivity-Factor, Peer-Delayed-Ack-Interval, PTSE-Holddown, PTSE-Lifetime-Factor, PTSE-Refresh-Interval, Rxmt-Interval

Host

Description: Specifies the DNS hostname or address of a host on the network, as follows:

- In the Log profile and Auxiliary-Syslog subprofile, the Host value specifies the IP address of a UNIX Syslog server.
- In the Terminal-Server profile, the Host value specifies the name, IP address, or X.121 address of the host to use for immediate service. When the Stinger unit authenticates a connection, it immediately directs the data stream to the specified host.

Usage: Your usage depends on the profile:

- For the Log profile and Auxiliary-Syslog subprofile, specify the IP address of a UNIX Syslog server. The default is 0.0.0.0.
- For the Terminal-Server profile, specify the name, IP address, or X.121 address of the host to use for immediate service. The default is a null string or null address.

Dependencies: The Host value in the Log profile affects all data streams. The Host value in each Auxiliary-Syslog subprofile affects the individual data stream directed to the specified device, and overrides the value in the Log profile.

Location: Log, Log > Auxiliary-Syslog, Terminal-Server > Immediate-Mode-Options

See Also: Facility, Immediate-Mode-Options, Port, Save-Number, Service, Syslog-Enabled

Host-Address

Description: Specifies the address to which the Stinger unit sends trap (notification) protocol data units (PDUs).

Usage: Specify an IP address in dotted decimal notation. The default is 0.0.0.0. If Host-Address is set to 0.0.0.0 and DNS (or YP/NIS) is supported, the Stinger unit looks up the host address and sends trap-PDUs. If Host-Address is set to 0.0.0.0 and Community-Name is null, traps are disabled.

Example: `set host-address = 10.2.3.4/24`

Location: Trap *host-name*

See Also: Alarm-Enabled, Community-Minus-1, Host-Name, Port-Enabled, Security-Mode

Host*N*

Description: Specifies the IP addresses of the TCP-clear login hosts.

Usage: Specify an IP address in dotted decimal notation. Separate the optional subnet mask from the address by entering a forward slash. The default is 0.0.0.0.

Example: `set host1 = 10.1.2.3/29`

Location: Connection > Tcp-Clear-Options

See Also: Detect-End-Of-Packet, End-Of-Packet-Pattern, Force-56Kbps, Host, Facility, Host, Immediate-Mode-Options, Save-Number, Service, Syslog-Enabled

Host-*N*

Description: Specifies the IP addresses of the Telnet hosts the Stinger unit displays in the terminal-server menu. You can specify up to four host addresses. If the user cannot use the terminal-server command-line interface, the hosts you specify are the only ones to which the user has access.

Usage: Specify an IP address in dotted decimal notation. Separate the optional subnet mask from the address by entering a forward slash. The default is 0.0.0.0.

Example: `host-1 = 10.1.2.3/29`

Dependencies: If terminal services are disabled, Host-*N* does not apply. In addition, the Stinger unit ignores the host addresses if Remote-Configuration=Yes. If you want to specify more than four addresses, you must do so in RADIUS.

Location: Terminal-Server > Menu-Mode-Options

See Also: Menu-Mode-Options, Remote-Configuration

Host-Name

Description: In the Trap profile, specifies the hostname of a station running SNMP manager utilities.

Usage: Specify a hostname of up to 16 characters. The default is null.

Example: `set host-name = sparst`

Dependencies: Consider the following:

- If Host-Address is set in this profile, the Stinger unit does not use the Host-Name value.
- The Stinger unit sends SNMP traps (notifications) to the host you specify.
- When DNS or YP/NIS is supported, but Host-Address is not specified, the Stinger unit uses the hostname to look up the LAN address of the SNMP manager.

Location: Trap *host-name*

See Also: Alarm-Enabled, Community-Minus-1, Domain-Name, Host-Name, IP-Address, Port-Enabled, Selectools-Enabled, Security-Mode

Host-Port

Description: Specifies the port to which traps are sent.

Usage: Specify a number from 1 to 65535. The default is 162.

Example: `set host-port = 20`

Location: Trap *name*

See Also: Active-Enabled, Msg-Proc-Model, Notify-Tag-List, Security-Level, Security-Model, Security-Name, Tag, Target-Params-Name

Hosts-Info *N*

Description: Specifies up to ten IP addresses and hostnames for the menu displayed in Terminal-Server menu mode.

Usage: The Hosts-Info setting is read only.

Example: `hosts-info [1] = { 200.50.40.5 }`

Location: Ext-Tsrv

See Also: Banner N, Init-Banner N

I

ICMP-Reply-Directed-Bcast

Description: Specifies whether the Stinger unit responds to directed-broadcast internet control message protocol (ICMP) echo requests.

Usage: Valid values are as follows:

- `Yes`—Specifies that the Stinger unit responds to directed-broadcast ICMP echo requests. This is the default.
- `No`—Specifies that the Stinger unit does not respond to directed-broadcast ICMP echo requests.

Example: `set icmp-reply-directed-bcast = no`

Location: IP-Global

See Also: Directed-Broadcast-Allowed

ID-Auth-Prefix

Description: Specifies the string inserted as a prefix to the phone number presented to the RADIUS server in caller-ID (CLID) or dialed-number identification service (DNIS) authentication requests.

Usage: Specify a string of up to 16 characters. The default is null.

Example: `set id-auth-prefix = test`

Location: External-Auth > Rad-Auth-Client

See Also: Auth-ID-Fail-Return-Busy, Auth-ID-Timeout-Return-Busy

Idle-Cell-Counter

Description: Indicates the total number of idle cells received by the Stinger unit.

Usage: The Idle-Cell-Counter value is read only.

Example: `idle-cell-counter = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: Valid-Cell-Counter

Idle-Logout

Description: Specifies the number of seconds a Telnet session can remain logged in with no keyboard activity.

Usage: Specify a number of seconds. The default is 0 (zero), which specifies that the station can remain logged in indefinitely.

Example: `set idle-logout = 60`

Location: System, User *name*

See Also: Auto-Logout, Idle-Timer

Idle-Timer

Description: Specifies the number of seconds the Stinger unit waits before clearing a call when a session is inactive.

Usage: Specify a number from 0 to 65535. The default setting is 120 seconds. Setting a value of 0 (zero) disables the idle timer, so that an idle call is maintained indefinitely.

Example: `set idle-timer = 30`

Dependencies: The Idle-Timer value applies only to sessions in which the Stinger unit transmits data in packets through the router to the wide area network (WAN) connection. Idle-Timer does not apply to nailed-up or terminal-server connections. For a terminal-server connection, use TS-Idle-Timer.

Location: Answer-Defaults > Session-Info, Connection *station* > Session-Options

See Also: Session-Options, TS-Idle-Timer

IDSL (profile)

Description: Configures IDSL ports.

Following is an example of the profile with default values, and with listings of the two subprofiles it contains

```
admin> list
[in IDSL/{ shelf-1 slot-13 5 }]
name = 1:13:5
line-interface = { no [ {switched-channel 605 } {
switched-channel 605 } ] +
physical-address* = { shelf-1 slot-13 5 }
```

```
admin> list line-interface
[in IDSL/{ shelf-1 slot-13 5 }:line-interface]
enabled = no
dual-link = no
channel-config = [ { switched-channel 605 } { switched-channel
605 } ]
dial-plan = 0
answer-number-1 = ""
answer-number-2 = ""
clock-source = eligible
idsl-bandwidth = idsl-128
admin> list channel-config 1
[in IDSL/{ shelf-1 slot-13 1
}:line-interface:channel-config[1]]
spid = ""
phone-number = ""
```

```
trunk-group = 0
channel-usage = switched-channel
route-port = { { 0 0 } { 0 } }
call-route-info = { any-shelf any-slot 0 }
nailed-group = 605
```

IDSL-Bandwidth

Description: Specifies the subscriber bandwith setting.

Usage: Sets available IDSL subscriber bandwidth to one of the following:

- `idsl-128`—DSL line has 128Kbps available for subscriber data
- `idsl-144`—IDSL line has 144Kbps available for subscriber data

Example: `idsl-bandwidth = idsl-128`

Location: IDSL { *N N N* }

See Also: Answer-Number-2, Clock-Source

IDSL-Stat (profile)

Description: Indicates the state of the IDSL channels.

Usage: Use the Dir, Read, and List commands to make this the current profile, as in this example:

```
techpubs> dir idsl-stat
0  11/01/2000 17:02:53  { shelf-1 slot-13 1 }
techpubs> read idsl-stat { shelf-1 slot-13 1 }
IDSL-STAT/{ shelf-1 slot-13 1 } read
techpubs> list
[in IDSL-STAT/{ shelf-1 slot-13 1 }]
physical-address* = { shelf-1 slot-13 1 }
line-state = disabled
channel-state = [ disabled disabled ]
error-count = [ 0 0 ]
techpubs> list chann
[in IDSL-STAT/{ shelf-1 slot-13 1 }:channel-state]
channel-state[1] = disabled
channel-state[2] = disabled
```

If-Adm-Weight-Abr

Description: Specifies the administrative weight of a Private Network-to-Network Interface (PNNI) for the available bit rate (ABR) service category.

Example: Administrative weight is a value used to specify preferential use of a link or node for a specific service category—in this case, for the PNNI ABR category. It is one of the elements of topology-state information exchanged among the nodes, along with a dynamic assessment of available bandwidth, assigned metrics, and other possible attribute values, all of which affect how the most efficient link is chosen at a given time.

Example: `set if-adm-weight-abr = 5040`

Location: PNNI-If { { *N N N* } *N* }

See Also: If-Aggr-Token, If-Adm-Weight-CBR, If-Adm-Weight-NRT-VBR, If-Adm-Weight-RT-VBR, If-Adm-Weight-UBR, If-Node-Index, If-Port-Id, If-RCC-Service-Category, If-RCC-Traffic-Descr-Index, If-Vp-Capability

If-Adm-Weight-CBR

Description: Specifies the administrative weight of a Private Network-to-Network Interface (PNNI) for the constant bit rate (CBR) service category.

Usage: Administrative weight is a value used to specify preferential use of a link or node for a specific service category—in this case, for the PNNI CBR category. It is one of the elements of topology state information exchanged among the nodes, along with a dynamic assessment of available bandwidth, assigned metrics, and other possible attribute values, all of which affect how the most efficient link is chosen at a given time.

Example: `set if-adm-weight-cbr = 5040`

Location: PNNI-If { { *N N N* } *N* }

See Also: If-Aggr-Token, If-Adm-Weight-Abr, If-Adm-Weight-NRT-VBR, If-Adm-Weight-RT-VBR, If-Adm-Weight-UBR, If-Node-Index, If-Port-Id, If-RCC-Service-Category, If-RCC-Traffic-Descr-Index, If-Vp-Capability

If-Adm-Weight-NRT-VBR

Description: Specifies the administrative weight of a Private Network-to-Network Interface (PNNI) for the non-real-time variable bit rate (NRT-VBR) service category.

Usage: Administrative weight is a value used to specify preferential use of a link or node for a specific service category—in this case, for the PNNI VBR category. It is one of the elements of topology state information exchanged among the nodes, along with a dynamic assessment of available bandwidth, assigned metrics, and other possible attribute values, all of which affect how the most efficient link is chosen at a given time.

Example: `set if-adm-weight-nrt-vbr = 5040`

Location: PNNI-If { { *N N N* } *N* }

See Also: If-Aggr-Token, If-Adm-Weight-Abr, If-Adm-Weight-CBR, If-Adm-Weight-RT-VBR, If-Node-Index, If-Port-Id, If-RCC-Service-Category, If-RCC-Traffic-Descr-Index, If-Vp-Capability

If-Adm-Weight-RT-VBR

Description: Pertains to the characterization of nodes in the Private Network-to-Network Interface (PNNI). Specifies the administrative weight of this interface for the real-time-variable bit rate (RT-VBR) service category.

Usage: Administrative weight is a value used to specify preferential use of a link or node for a specific service category. It is one of the elements of topology state information exchanged among the nodes, along with a dynamic assessment of available bandwidth, assigned metrics, and other possible attribute values, all of which affect how the most efficient link is chosen at a given time.

Example: `set if-adm-weight-rt-vbr = 5040`

Location: PNNI-If { { *N N N* } *N* }

See Also: If-Aggr-Token, If-Adm-Weight-Abr, If-Adm-Weight-CBR, If-Adm-Weight-NRT-VBR, If-Adm-Weight-UBR, If-Node-Index, If-Port-Id, If-RCC-Service-Category, If-RCC-Traffic-Descr-Index, If-Vp-Capability

If-Adm-Weight-UBR

Description: Specifies the administrative weight of this interface for the unspecified bit rate (UBR) service category.

Usage: Administrative weight is a value used to specify preferential use of a link or node for a specific service category, in this case for a Private Network-to-Network Interface (PNNI) . It is one of the elements of topology state information exchanged among the nodes, along with a dynamic assessment of available bandwidth, assigned metrics, and other possible attribute values, all of which affect how the most efficient link is chosen at a given time.

Example: `set if-adm-weight-ubr = 5040`

Location: PNNI-If { { any-shelf any-slot *N* } *N* }

See Also: If-Aggr-Token, If-Adm-Weight-Abr, If-Adm-Weight-CBR, If-Adm-Weight-NRT-VBR, If-Adm-Weight-RT-VBR, If-Node-Index, If-Port-Id, If-RCC-Service-Category, If-RCC-Traffic-Descr-Index, If-Vp-Capability

If-Aggr-Token

Description: Specifies the configured aggregation token for the associated Asynchronous Transfer Mode (ATM) interface.

Usage: An aggregation token is used to determine which links to a given neighbor node are to be aggregated and used as a single logical link

Example: `set if-aggr-token = 0`

Location: PNNI-If { { any-shelf any-slot *N* } *N* }

See Also: If-Adm-Weight-Abr, If-Adm-Weight-CBR, If-Adm-Weight-NRT-VBR, If-Adm-Weight-RT-VBR, If-Adm-Weight-UBR, If-Node-Index, If-Port-Id, If-RCC-Service-Category, If-RCC-Traffic-Descr-Index, If-Vp-Capability

If-Group-Index

Description: Indicates the Simple Network Management Protocol (SNMP) interface group index assigned to the line.

Usage: The IF-Group-Index setting is read only.

Example: if-group-index = 0

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Status,
SDSL-Stat {shelf-*N* slot-*N N*} > Physical-Status

See Also: Major-Firmware-Ver, Minor-Firmware-Ver, Physical-Address, Unit-Type, Up-Stream-Rate

If-Index

Description: Specifies the local interface over which the reachable address can be reached.

Usage: The value 0 (zero), the default, indicates an unknown interface or reachability through a remote node.

Example: if-index = 0

Location: PNNI-Route-Addr

See Also: Adv-Node-Id, Adv-Port-Id, If-Index, Info, Metrics-Tag, Oper-Status, Originate-Advert, PNNI-Scope, Proto, PTSE-Id-PTSE-Id, Type,VP-Capability

If-Node-Index

Description: Specifies the Private Network-to-Network Interface (PNNI) node within the switching system that the interface is directly attached to.

Usage: Specify a number from 1 to 65535. The value zero is not a valid value.

Example: set if-node-index = 1

Location: PNNI-If { { *N N N* } *N* }

See Also: If-Aggr-Token, If-Adm-Weight-CBR, If-Adm-Weight-NRT-VBR, If-Adm-Weight-RT-VBR, If-Adm-Weight-UBR, If-Port-Id, If-RCC-Service-Category, If-RCC-Traffic-Descr-Index, If-Vp-Capability

If-Number

Description: Specifies the interface number.

Usage: Specify a number to identify the interface.

Example: set if-number = 159

Location: ATM-If-Stat { { *N N* } *N* }

If-Port-Id

Description: Indicates the nailed-group number associated with the trunk port.

Usage: The system assigns each interface a unique default number. This value is read only.

Example: `if-port-id = 0`

Location: PNNI-If { { *N N N* } *N* }

See Also: If-Aggr-Token, If-Adm-Weight-CBR, If-Adm-Weight-NRT-VBR, If-Adm-Weight-RT-VBR, If-Adm-Weight-UBR, If-Node-Index, If-RCC-Service-Category, If-RCC-Traffic-Descr-Index, If-Vp-Capability

If-RCC-Service-Category

Description: Specifies the service category used for the Private Network-to-Network Interface (PNNI) routing control channel (RCC) on the interface assigned in this profile.

Usage: Valid values are as follows:

- `cbr`—(constant bit rate) is a service class for connections that depend on precise clocking to ensure undistorted delivery of bits.
- `vbr-rt`—(variable bit rate real-time) is a service class that handles the packaging of special delay-sensitive applications (such as packet video) that require low cell-delay variation between endpoints.
- `vbr-nrt`—(variable bit rate non-real-time) is a service class that handles packaging for the transfer of long, bursty data streams over a pre-established ATM connection.
- `ubr`—(unspecified bit rate) is a service class that handles bursty LAN traffic, as well as data that accepts delays and cell loss. It is a best-effort service that does not specify bit rates or traffic values, and offers no QoS guarantees.

Example: `set if-rcc-service-category = nrt-vbr`

Location: PNNI-If { { *N N N* } *N* }

See Also: If-Aggr-Token, If-Adm-Weight-CBR, If-Adm-Weight-NRT-VBR, If-Adm-Weight-RT-VBR, If-Adm-Weight-UBR, If-Node-Index, If-Port-Id, If-RCC-Traffic-Descr-Index, If-Vp-Capability

If-RCC-Traffic-Descr-Index

Description: Specifies the traffic descriptor index used for traffic allocation for the Private Network-to-Network Interface (PNNI) routing control channel (VCI = 18) on this interface.

Usage: The default 2 specifies the default-control service contract used by default for PNNI signaling and routing control.

Example: `set if-rcc-traffic-descr-index = 2`

Location: PNNI-If { { *N N N* } *N* }

See Also: If-Aggr-Token, If-Adm-Weight-CBR, If-Adm-Weight-NRT-VBR, If-Adm-Weight-RT-VBR, If-Adm-Weight-UBR, If-Node-Index, If-Port-Id, If-RCC-Service-Category, If-Vp-Capability

If-Remote-Address

Description: Specifies the IP address of the numbered interface at the remote end of a link.

Usage: Specify the IP address of the numbered interface in dotted decimal notation. The default is 0.0.0.0.

Example: set if-remote-address = 10.1.2.3

Dependencies: For IF-Remote-Address to apply, you must enable IP for the Connection profile.

Location: Connection *station* > IP-Options

See Also: IP-Options

If-Sparing (profile)

Description: *Not currently used.* When this becomes available, configures spare line interface module (LIM)s, using automatic sparing.

Usage: Us the New and List commands to make this the current profile, as in this example.

```
mitch-admin->new if-sparing
IF-SPARING-CONFIG read
mitch-admin->list
[in IF-SPARING-CONFIG]
if-spared-slot = [ any-slot any-slot any-slot any-slot any-slot
any-slot any-sl+
if-spare-slot = [ any-slot any-slot any-slot any-slot any-slot
any-slot any-slo+
if-auto-spare-info = [ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 +
lim-auto-spare-info = [ any-slot any-slot any-slot any-slot
any-slot any-slot a+
```

If-Vp-Capability

Description: Specifies whether the ability to establish a virtual private channel (VPC) on the interface is enabled.

Usage: Only physical ATM interfaces can set this parameter to True. If it is set to True on any other type of interface, the setting is ignored.

Example: set if-vp-capability = false

Location: PNNI-If { { *N N N* } *N* }

See Also: If-Aggr-Token, If-Adm-Weight-CBR, If-Adm-Weight-NRT-VBR, If-Adm-Weight-RT-VBR, If-Adm-Weight-UBR, If-Node-Index, If-Port-Id, If-RCC-Service-Category, If-RCC-Traffic-Descr-Index

Ignore-Cell-Delay-Variation-Tolerance

Description: Specifies whether cell delay variation tolerance (CDVT) is observed or not.

Usage: Default value is Yes. When this parameter is set to `yes`, the `cell-delay-variation-tolerance` parameter is ignored. An internal parameter is used to tolerate bursty customer premises equipment (CPE) that has inadequate or no traffic shaping capability.

Example: `set ignore cell-delay-variation-tolerance = yes`

Dependencies: When this parameter is set to `no`, the `ignore-max-burst-size` parameter is applied.

Location: ATM-QOS

See Also: Cell-Delay-Variation-Tolerance

Ignore-Def-Route

Description: Specifies whether the Stinger unit ignores the default route when applying RIP updates to its routing table. The default route specifies a static route to another IP router, which is often a local router. When you configure the Stinger unit to ignore the default route, RIP updates do not modify the default route in the Stinger unit routing table.

Usage: Valid values are as follows:

*   `Yes`—Specifies that the Stinger unit ignores advertised default routes. Lucent recommends that you specify Yes.
*   `No`—Specifies that the Stinger unit can modify its default route on the basis of RIP updates. This is the default.

Example: `set ignore-def-route = yes`

Location: IP-Global

See Also: Client-Default-Gateway, RIP

Ignore-ICMP-Redirects

Description: Specifies whether the Stinger unit processes incoming ICMP redirect packets. ICMP redirects are one of the oldest route-discovery mechanisms on the Internet, and one of the least secure because they can be used to redirect packets dynamically. Most secure sites configure the Stinger unit to ignore redirect packets.

Usage: Valid values are as follows:

*   `Yes`—Specifies that the Stinger unit ignores ICMP redirect packets.
*   `No`—Specifies that the Stinger unit processes ICMP redirect packets. This is the default.

Example: set ignore-icmp-redirects = yes

Location: IP-Global

See Also: Preference, RIP-Pref, Static-Pref

Ignore-Lineup

Description: This parameter is used differently in the System profile and in the Line profile.

In the *System profile* specifies whether the Stinger unit ignores line status when determining whether calls are established.

In the *Line profile* specifies whether the line status of a slot determines the Stinger call control mechanism on a specified port.

Usage: *In the System profile*, specify one of the following values for this parameter:

- no—The Stinger call-control mechanism allows calls to be established when the line state is up and disallow calls when the line state is down. This is the default.

- yes—The Stinger call-control mechanism ignores the line state and allows calls to be established on a port as long as the specified slot is operational and the specified port is enabled.

Usage: *In the line profile*, specify one of the following values for this parameter:

- system-defined—Sets the Stinger to inherit the Ignore-Lineup value from the system profile. This is the default.

- no—Sets the Stinger call-control mechanism to ignore the system-wide Ignore-Lineup setting and allows calls to be established when the line state is operational and disallow calls on the port when the line state is down.

- yes—Sets the Stinger call-control mechanism to ignore both the line state and the system-wide setting and allows calls to be established on the specified port as long as the specified slot is operational and the specified port is enabled.

Example: set ignore-lineup = yes

Location: System, Line

See Also: Line (profile), System (profile)

Ignore-Max-Burst-Size

Description: Specifies whether the Max-Burst-Size parameter setting is observed or not.

Usage: Valid values are as follows:

- Yes—Specifies the max-burst-size parameter is ignored. Instead an internal parameter is used to tolerate bursty CPE that does not have or has inadequate traffic shaping capability. This is the default.

- No—Specifies that the max-burst-size parameter is applied.

```
Example: set ignore-max-burst-size = no
```

Location: ATM-QOS

See Also: Max-Burst-Size

ILMI-Admin-Status

Description: *Interim link management interface (ILMI) is not supported with the current software version.* Specifies the bit map indicating which Ilmi-Admin-Status Components of ILMI are administratively enabled on this interface.

Usage: With the default 0 (zero) value, no ILMI components are operational. *ILMI is not supported with the current software version.*

Example: ilmi-admin-status = 0

Location: ATM-IF-CONFIG { { any-shelf any-slot 0 } 0 } > Extension-Config

See Also: ILMI-VCI, ILMI-VPI

ILMI-VCI

Description: *Interim link management interface (ILMI) is not supported with the current software version.* Specifies the value of the virtual channel connection(VCC) supporting the ILMI at this ATM interface

Usage: If this value and the value of the Ilmi-Vpi parameter are both equal to zero then the ILMI is not supported at this ATM interface.

Example: ilmi-vci = 0

Location: ATM-IF-CONFIG { { any-shelf any-slot 0 } 0 } > Base-Config

See Also: ILMI-Admin-Status, ILMI-VPI

ILMI-VPI

Description: *Interim link management interface (ILMI) is not supported with the current software version.* Ilmi-Vpi VPI value of the virtual channel connection(VCC) supporting the ILMI at this ATM interface.

Usage: If this value and the value of the Ilmi-Vci parameter are both equal to 0 (zero) then the ILMI is not supported at this ATM interface.

Example: ilmi-vpi = 0

Location: ATM-IF-CONFIG { { any-shelf any-slot 0 } 0 } > Base-Config

See Also: ILMI-VCI

IMA

Description: Specifies whether code images for T1 and E1 modules should be stored in Flash memory.

Usage: Valid values are as follows:

- `auto`—Load code image if there is a module installed of that type. Otherwise, skip it. This is the default.
- `load`—Load code image when present in tar file
- `skip`—Skip code image when present in tar file

Example: `ima = auto`

Location: Load-Select

See Also: 48-DMT-ADSL, Load-Select (profile)

Imagroup (profile)

Description: Configures an inverse multiplexing ATM IMA port. When you enter the command `new imagroup` a new profile is created to establish all group-related IMA parameters.

Usage: Following is an example of an Imagroup profile.

```
admin> list

[in IMAGROUP/"" (new)]
name* = ""
active = no
nailed-group = 0
group-symmetry-mode = symmetric-operation
version = v1-1
do-version-fallback = no
lasr = yes
ne-tx-clk-mode = ctc
tx-min-num-links = 1
rx-min-num-links = 1
ima-id = 0
frame-length = 128
diff-delay-max = 25
check-far-end-ima-id = no
expected-far-end-ima-id = 0
far-end-check-frame-length = no
expected-far-end-frame-length = 128
atm-if-delay = 0
tpp-test-link = -1
tpp-test-pattern = -1
tpp-state = disabled
tx-min-num-links = 1
rx-min-num-links = 1
ima-id = 0
frame-length = 128
diff-delay-max = 25
```

```
check-far-end-ima-id = no
expected-far-end-ima-id = 0
far-end-check-frame-length = no
expected-far-end-frame-length = 128
atm-if-delay = 0
tpp-test-link = -1
tpp-test-pattern = -1
tpp-state = disabled
vp-switching-vpi = 15
```

IMA-Group-Stat (profile)

Description: This profile monitors the performance of an imagroup, and is created by the system automatically once the imagroup profile is properly configured and associated with a DS1-ATM profile.

```
Use the Read and List commands to make this the current profile. A
listing follows.
admin> list
[in IMA-GROUP-STAT/ima3_1]
name* = ima3_1
physical-address = { shelf-1 slot-3 25 }
near-end-ima-group-state = operational
failure-status = no-failure
far-end-txclock-mode = ctc
tx-timing-ref-link = 0
rx-timing-ref-link = 0
rx-ima-id = 0
rx-frame-length = 128
least-delay-link = 0
diff-delay-max-obs = 0
running-secs = 1435
tx-avail-cellrate = 2147488176
rx-avail-cellrate = 4493
tx-num-config-links = 2
rx-num-config-links = 2
tx-num-active-links = 1
rx-num-active-links = 1
tx-oam-label-value = 3
rx-oam-label-value = 3
last-change-time = 52
tpp-test-link = 1
tpp-test-pattern = 100
tpp-test-status = link-fail
valid-intervals = 0
invalid-intervals = 96
vpi-vci-range = vpi-0-15-vci-32-127
vp-switching-vpi = 0
ima-group-statistic = { 40 0 6571424 }
nailed-group = 310
```

See Also: Imagroup (profile)

IMA-Group-Statistic

Description: Subprofile of the IMA-group-stat profile indicates read-only status of the IMA group.

Usage: Following is an example listing of this subprofile

```
admin> list
[in IMA-GROUP-STAT/ima-rt:ima-group-statistic]
unavailable-secs = 56
near-end-num-failures = 3
far-end-num-failures = 6
```

IMAhw-Config (profile)

Description: Configures hardware-specific parameters that are common to the inverse mulitplexing ATM (IMA) chip. For example, because the 24-port IMA line interface modules (LIMs) contain three chips, three profiles are created. However, because the 8-port IMA LIMs contain a single chip, only one profile is created for it.

Usage: Following is an example Imahw-Config profile

```
admin> list
[in IMAHW-CONFIG/{ any-shelf any-slot 0 } (new)]
name = ""
physical-address* = { any-shelf any-slot 0 }
alpha-ima-value = 2
beta-ima-value = 2
gamma-ima-value = 1
alpha-cell-delin-value = 7
delta-cell-delin-value = 6
```

IMA-Id

Description: Specifies the inverse multiplexing ATM (IMA) identifier of the IMA group.

Usage: Specify a number from 0 (zero) to 255.

Example: `ima-id = 7`

Location: IMA-Group *name*

See Also: Active, Group-Symmetry-Mode, Nailed-Group

IMA-Link-Statistic

Description: Subprofile of the DS1-ATM- Stat profile indicates read-only statistics of the inverse multiplexing ATM (IMA) link.

Usage: Following is an example listing of this subprofile

```
admin> list
[in DS1-ATM-STAT/{ shelf-1 slot-2 20 }:ima-link-statistic]
ima-violations-counter = 0
```

```
oif-anomalies-counter = 0
near-end-sev-errored-secs-counter = 0
far-end-sev-errored-secs-counter = 0
near-end-unavail-secs-counter = 0
far-end-unavail-secs-counter = 0
near-end-tx-unusable-secs-counter = 0
near-end-rx-unusable-secs-counter = 0
far-end-tx-unusable-secs-counter = 0
far-end-rx-unusable-secs-counter = 0
near-end-tx-num-failures-counter = 0
near-end-rx-num-failures-counter = 0
far-end-tx-num-failures-counter = 0
far-end-rx-num-failures-counter = 0
tx-stuffs-counter = 0
rx-stuffs-counter = 0
elapsed-seconds = 0
```

Location: DS1-ATM-Stat

IMA-Link-Status

Description: Subprofile of the DS1-ATM- Stat profile indicates read-only status of the inverse multiplexing ATM (IMA) link.

Usage: Following is an example listing of this subprofile

```
admin> list
[in DS1-ATM-STAT/{ shelf-1 slot-2 20 }:ima-link-status]
near-end-tx-link-state = not-in-group
near-end-rx-link-state = not-in-group
far-end-tx-link-state = not-in-group
far-end-rx-link-state = not-in-group
near-end-rx-failure-status = no-failure
far-end-rx-failure-status = no-failure
tx-lid = 0
rx-lid = 0
relative-delay = 0
rx-test-pattern = 0
rx-testproc-status = disabled
valid-intervals = 96
invalid-intervals = 0
```

Location: DS1-ATM-Stat

IMA-Option-Config

Description: A subprofile of the DS1-ATM profile. Configures an inverse multiplexing ATM (IMA) interface.

Usage: Use the Dir, Read, and List commands to make this the current profile. This example also lists a nested subprofile Txlink-Config.

```
admin> list ima-option-c
[in DS1-ATM/{ any-shelf any-slot 0 }:line-config:ima-option-config
(new)]
txlink-config = { 0 3 fast auto 10 0 }
rxlink-config = { 3 fast 10 100 auto 10 2500 10000 10 }
admin> list txlink-c
[in DS1-ATM/{ any-shelf any-slot 0 }:line-config:
ima-option-config:txlink-confi+
ne-tx-lid = 0
add-link-cond-time = 3
link-recovery-type = fast
fault-clearing-type = auto
fault-clearing-time = 10
priority = 0
admin> list .. rxlink-c
[in DS1-ATM/{ any-shelf any-slot 0
}:line-config:ima-option-config:rxlink-confi+
add-link-cond-time = 3
link-recovery-type = fast
rec-link-cond-time = 10
rx-lid-learning-time = 100fault-clearing-type = auto
fault-clearing-time = 10
in-defect-int-time = 2500
out-defect-int-time = 10000
defect-ratio = 10
```

Location: DS1-ATM

IMA-Rt

Description: Subprofile of the IMA-Group- Stat profile indicates read-only status of the inverse multiplexing ATM (IMA) route.

Usage: Following is an example listing of this subprofile

```
admin> list
[in IMA-GROUP-STAT/ima-rt]
name* = ima-rt
physical-address = { shelf-1 slot-2 25 }
near-end-ima-group-state = operational
far-end-ima-group-state = operational
failure-status = no-failure
far-end-txclock-mode = ctc
tx-timing-ref-link = 1
rx-timing-ref-link = 1
rx-ima-id = 0
```

```
rx-frame-length = 128
least-delay-link = 0
diff-delay-max-obs = 0
running-secs = 53461
tx-avail-cellrate = 7244
rx-avail-cellrate = 7188
tx-num-config-links = 2
rx-num-config-links = 2
tx-num-active-links = 2
rx-num-active-links = 2
tx-oam-label-value = 3
rx-oam-label-value = 3
last-change-time = 1315
tpp-test-link = 0
tpp-test-pattern = 255
tpp-test-status = disabled
valid-intervals = 0
invalid-intervals = 96
vpi-vci-range = vpi-0-15-vci-32-127
vp-switching-vpi = 15
ima-group-statistic = { 56 3 6 }
```

Location: IMA-Group-Stat

IMA-Violations-Counter

Description: Indicates the number of IMA control Protocol (ICP) violations. ICP violations are errored, invalid or missing ICP cells in a 15-minute interval. This value does indicate severely errored seconds-IMA (SES-IMA) or unavailable-seconds-IMA (UAS-IMA) conditions.

Usage: Valid range is from 0 (zero) to 2147483647.

Example: `ima-violations-counter = 0`

Location: DS1-ATM- Stat { shelf-*N* slot-*N N*} > Ima-Link-Statistic

See Also: Elapsed-Seconds, Far-End-Rx-Num-Failures-Counter, Far-End-Rx-Unusable-Secs-Counter, Far-End-Sev-Errored-Secs-Counter, Far-End-Unavail-Secs-Counter

Immediate-Mode-Options

Description: A subprofile that configures immediate mode. In immediate mode, the Stinger unit makes a connection to an IP host immediately upon login.

Usage: With Terminal-Server as the working profile, list the Immediate-Mode-Options subprofile. For example:

```
admin> list immediate-mode-options
[in TERMINAL-SERVER:immediate-mode-options]
service=none
telnet-host-auth=no
```

```
host=""
port=0
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: Terminal-Server

Impulse-Noise-Read-High-Threshold

Description: Indicates the number of impulse events with levels exceeding threshold + 2delta in a copper loop test (CLT).

Usage: The value is read only.

Example: `impulse-noise-read-high-threshold = 0`

Location: CLT-Result

See Also: Impulse-Noise-Read-Low-Threshold

Impulse-Noise-Read-Low-Threshold

Description: Indicates the number of impulse noise events with levels between threshold and threshold + delta in a copper loop test (CLT).

Usage: The value is read only.

Example: `impulse-noise-read-low-threshold = 0`

Location: CLT-Result

See Also: Impulse-Noise-Read-High-Threshold

Impulse-Noise-Read-Mid-Threshold

Description: Indicates the number of impulse events with levels between threshold + delta and threshold + 2delta in a copper loop test (CLT).

Usage: The value is read only.

Example: `impulse-noise-read-mid-threshold = 0`

Location: CLT-Result

See Also: Impulse-Noise-Read-Low-Threshold

Impulse-Noise-Start-Dead-Time

Description: Specifies the measurement delay after the Stinger unit detects the initial impulse.

Usage: Specify a number from 10 to 2550 tenths (.1) of a millisecond.

Example: `set impulse-noise-start-dead-time = 11`

Location: CLT-Command

See Also: Impulse-Noise-Start-Max-Count

Impulse-Noise-Start-Delta

Description: Specifies the amount above threshold for noise spike detection in a copper loop test (CLT).

Usage: Specify a number from 2 to 6 decibels below 1 milliwatt (dBm).

Example: `set impulse-noise-start-delta = 4`

Location: CLT-Command

See Also: Impulse-Noise-Start-Max-Count

Impulse-Noise-Start-Max-Count

Description: Specifies the maximum number of impulse events to be counted during a single measurement in a copper loop test (CLT).

Usage: Specify a number from 1 to 9999.

Example: `set impulse-noise-start-max-count = 200`

Location: CLT-Command

See Also: Impulse-Noise-Start-Delta

Impulse-Noise-Start-Thresh

Description: Specifies the threshold value of the smallest noise spike detected.

Usage: Specify a number from 50db to 100db below 1 milliwatt (dBm).

Example: `set impulse-noise-start-thresh = 60`

Location: CLT-Command

See Also: Impulse-Noise-Start-Max-Count

Impulse-Noise-Start-Dead-Time

Description: Specifies the measurement delay after unit detects the initial impulse.

Usage: Specify a number from 10 to 2550 tenths (.1) millisecond.

Example: `set impulse-noise-start-dead-time = 50`

Location: CLT-Command

See Also: Impulse-Noise-Start-Max-Count

Impulse-Noise-Start-Timer

Description: Specifies the duration of impulse noise measurement in a copper loop test (CLT).

Usage: Specify a number from 1 to 9999 minutes.

Example: `set impulse-noise-start=timer = 30`

Location: CLT-Command

See Also: Impulse-Noise-Start-Max-Count

Incoming-Cells

Description: Specifies the number of cells coming in on the interface.

Usage: This read-only statistic helps you verify the operation of the physical interface.

Example: `incoming-cells = 92`

Location: AL-DMT- Stat { shelf-*N* slot-*N N* }:physical-statistic

See Also: Far-End-FEC, Far-End-HEC, Near-End-FEC, Near-End-HEC, Received-Rs-Blocks, Transmitted-Rs-Blocks

Incoming-priority

Description: Specifies the relative priority of Asynchronous Transfer Mode (ATM) cells incoming from this line interface module (LIM) or control module slot.

Usage: Valid values are as follows:

- `high-priority`—ATM cells incoming from this LIM or control module slot have a higher priority than others.
- `low-priority`—ATM cells incoming from this LIM or control module slot have a lower priority than others. This is the default.

Example: `set incoming-priority = high-priority`

Location: SLOT-STATIC-CONFIG { shelf-*N* slot-*N N*} > Atm-Parameters

Increment-Channel-Count

Description: Specifies the number of channels the Stinger unit adds for a manual or automatic bandwidth change during a call.

Usage: Specify an number from 1 to 32. The default is 1.

Example: `set increment-channel-count = 3`

Location: Answer-Defaults > MPP-Answer, Connection station > MPP-Options

See Also: Add-Persistence, Bandwidth-Monitor-Direction, Base-Channel-Count, Decrement-Channel-Count, Dynamic-Algorithm, Maximum-Channels, Minimum-Channels, Seconds-History, Summarize-RIP-Routes, Target-Utilization

In-Defect-Int-Time

Description: *Not currently used.* Specifies the maximum amount of time in milliseconds allowed to learn the receiving link ID (RX LID) in intelligent call processing (ICP) cells.

Usage: If the defect is persistent for this time, the Rx Failed state machine enters the FAILED state. Valid range is from 0 (zero) to 2147483647

Example: `set in-defect-int-time = 2500`

Location: DS1-ATM { shelf-*N* slot-*N N*} > Line-Config > IMA-Option-Config > Rxlink-Config

See Also: Add-Link-Cond-Time, Defect-Ratio, Fault-Clearing-Type, Rec-Link-Cond-Time, Rx-Lid-Learning-Time

Index

Description: Indicates an internal index, or distinguishes between multiple listings.

Usage

- In theIndex subprofile of the Error profile, the value of the Index parameter indicates the internal index of the entry. The Index setting is read only.

- In the addr-index subprofile of the PNNI-Route-Addr profile, you specify the value of the Index parameter to distinguish between multiple listings of connectivity to a given address prefix from the local node.

Example: index = mithra0

Location: ERROR *index*

See Also: Interface-Address

Inet-Profile-Type

Description: Indicates whether the internet profile associated with the hostname in the Admin-State-Perm-If is a local profile or a profile from the RADIUS server.

Usage: The Inet-Profile-Type setting is read only. The number 0 (zero) indicates a local profile. The number 1 (one) indicates a RADIUS profile.

Example: inet-profile-type = 1

Location: Admin-State-Perm-If *station*

See Also: Desired-State, Desired-Trap-State, Device-Address, SNTP-Info, Station

Info

Description: *Not currently used.* Specifies a reference to MIB definitions specific to the routing protocol set in the Proto parameter.

Usage: This parameter is currently set to the null string.

Example: info = ""

Location: PNNI-ROUTE-ADDR

Inform-Retry-Count

Description: Indicates the number of retries attempted when acknowledgement is not received for an Inform protocol data unit (PDU).

Usage: When this read-only parameter becomes available the valid range is from 0 to 2147483637. The default is 4.

Example: Inform-timeout = 10

Location: TRAPS *name*

Inform-Time-Out

Description: *Not currently used.* Indicates the timeout interval in units of 0.01 seconds after which the Inform protocol data unit (PDU) is retransmitted on receiving no acknowledgement.

Usage: When this read-only parameter becomes available the valid range is from 0 to 2147483637. Default is 1500.

Example: Inform-timeout = 1000

Location: TRAPS *name*

Inet-Profile-Type

Description: Specifies whether the nailed-up profile is a local profile or a RADIUS profile.

Usage: The Inet-Profile-Type setting is read only. The number 0 (zero) indicates a local profile. The number 1 (one) indicates a RADIUS profile.

Example: inet-profile-type = 1

Location: Admin-State-Perm-If *station*

See Also: Desired-State, Desired-Trap-State, Device-Address, SNTP-Info, Station

Info

Description: *Not currently used.* Specifies a reference to MIB definitions specific to the routing protocol set in the Proto parameter.

Usage: This parameter is currently set to the null string.

Example: `info = ""`

Location: PNNI-ROUTE-ADDR

Init-Banner *N*

Description: Indicates the initial-banners for terminal-server logins, downloaded from RADIUS.

Usage: The Init-Banner setting is read only.

Example: `init-banner [1] = "Welcome"`

Location: Ext-Tsrv

See Also: Banner N, Hosts-Info N

Initial-ADSL-Ver

Description: Indicates the number of changes made to the Alcatel Proprietary Exchange phase in this version of the software.

Usage: The Initial-ADSL-Ver value is read only. The current value is 1.

Note: This parameter is only valid for the ADSL 12-port LIM which is based on the Alcatel chipset.

Example: `initial-adsl-ver = 1`

Dependencies: Both ends of the connection must agree on the value of Initial-ADSL-Ver parameter for the chip sets to take advantage of the advanced functionality supported by Alcatel equipment.

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Status

See Also: Apply-To

Init-Time

Description: A private network to node interface (PNNI) setting. Init-Time specifies the number of seconds the node delays advertising its choice of the preferred peer group leader (PGL), after having initialized operation and reached the full state with a least one neighbor in the peer group.

Usage: Specify the number of seconds.

Note: This parameter is not currently supported in the node-SVCC-RCC subprofile.

Example: `init-time = 15`

Location: PNNI-Node-Config *N* > Node-Pgl

See Also: Leadership-Priority, Override-Delay, Parent-Node-Index, Reelect-Time

Interface-Address

Description: Specifies an interface address in the following format:

```
{{shelf slot item} logical-item }
```

This format identifies the physical address and a logical item. For information about the physical address format, see the description for Physical-Address. The logical item number is 0 (zero), except when the device is further divided.

Usage: In most cases, the Interface-Address value is obtained from the system. However, you can clone a profile by reading an existing one and changing its device address. To modify the value, use the List and Set commands. For example:

```
admin> list interface-address
[in ETHERNET/{ { shelf-1 slot-8 } 5 }:interface-address]
physical-address={ shelf-1 slot-8 5 }
logical-item=0

admin> set logical-item = 11
```

Alternatively, just use the Set command:

```
admin> set interface-address logical-item = 11
```

Location: Ethernet {shelf-*N* slot-*N N*}, IP-Interface {{shelf-*N* slot-*N N*}

See Also: Device-Address, Item-Number, Physical-Address, Shelf

Interface-Sparing Enabled

Description: Specifies whether the interface (port) redundancy trap should to be sent to the identified host.

Usage: Valid values are as follows:

Usage:

- `Yes`—Specifies that the interface (port) sparing redundancy should to be sent to the identified host. This is the default.
- `Yes`—Specifies that the interface (port) sparing redundancy should not to be sent to the identified host.

Example: set interface-sparing-enabled = yes

Dependencies: Only when this parameters is set to `no` can the Stinger unit report traps to an SNMP agent.

Location: TRAPS *name*

See Also: LIM-Sparing-Enabled

Interleave-Path-Config

Description: A subprofile that configures minimum, maximum, and planned upstream and downstream bit rates for a rate-adaptive connection on an interleaved channel.

Usage: With AL-DMT as the working profile, list the Interleave-Path-Config subprofile.

```
admin> read al-dmt {1 4 1}
AL-DMT/{ shelf-1 slot-4 1 } read

admin> list interleave
[in AL-DMT/{ shelf-1 slot-4 1 }:interleave-path-config]
min-bitrate-up=0
min-bitrate-down=0
max-bitrate-up=0
max-bitrate-down=0
planned-bitrate-up=0
planned-bitrate-down=0
max-delay-up=16
max-delay-down=16
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: AL-DMT {shelf-*N* slot-*N N*}

See Also: Max-Bitrate-Down, Max-Bitrate-Up, Max-Delay-Down, Max-Delay-Up, Min-Bitrate-Down, Min-Bitrate-Up, Planned-Bitrate-Down, Planned-Bitrate-Up

Interval-Auto-Correction

Description: Specifies the interval in milliseconds in which a line interface module (LIM) attempts autocorrection.

Usage: Some LIMs are capable of performing detection before correction. In that case, the LIMs try to detect the problem and then correct it. Values can be from 0 to 2147483647. The default is 600000 milliseconds (10 minutes)

Example: set interval-auto-correction = 500000

Location: System-Integrity > Integrity-Config

See Also: Encapsulation-Protocol, Enable-Continuous-Detection, Ratio-Centralized-Detection

Interval-Performance-Monitoring

Description: A read-only subprofile that indicates SONET performance values for the preceding four 15-minute intervals, providing performance data for the past hour.

Usage: With OC3-ATM-Stat as the working profile, list Interval- Performance-Monitoring. For example:

```
admin> list interval-performance-monitoring 1
[in OC3-ATM-STAT/{ shelf-1 trunk-module-2 1 }:interval-performance-
monitoring[1]]
sonet-section-errored-seconds=0
sonet-section-severely-errored-seconds=0
sonet-section-severely-errored-framing-seconds=0
sonet-section-coding-violations=0
sonet-line-errored-seconds=0
sonet-line-severely-errored-seconds=0
sonet-line-coding-violations=0
sonet-line-unavailable-seconds=0
sonet-far-end-line-errored-seconds=0
sonet-far-end-line-severely-errored-seconds=0
sonet-far-end-line-coding-violations=0
sonet-far-end-line-unavailable-seconds=0
sonet-path-errored-seconds=0
sonet-path-severely-errored-seconds=0
sonet-path-coding-violations=0
sonet-path-unavailable-seconds=0
sonet-far-end-path-errored-seconds=0
sonet-far-end-path-severely-errored-seconds=0
sonet-far-end-path-coding-violations=0
sonet-far-end-path-unavailable-seconds=0
```

You can then use the Set command to modify the settings in the subprofile. To close the
subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Dependencies: The information in the Performance-Monitoring subprofile updates the values
in the Interval-Performance-Monitoring subprofile.

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: SONET-Far-End-Line-Errored-Seconds,
SONET-Far-End-Line-Severely-Errored-Seconds,
SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations,
SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Severely-Errored-Seconds,
SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations,
SONET-Line-Errored-Seconds, SONET-Line-Severely-Errored-Seconds,
SONET-Line-Unavailable-Seconds, SONET-Path-Coding-Violations,
SONET-Path-Errored-Seconds, SONET-Path-Severely-Errored-Seconds,
SONET-Path-Unavailable-Seconds, SONET-Section-Coding-Violations,
SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds,
SONET-Section-Severely-Errored-Seconds

Intra-Community

Description: *Not currently used.* Specifies the highest level of the Private
Network-to-Network Interface (PNNI) hierarchy that lies within the intracommunity scope.

Usage: When this parameter becomes available, you will specify a number from 0 to 104. The
default value is 48.

Example: intra-community = 48

Location: PNNI-Node-Config N > Node-Scope-Mapping

Intra-Organization

Description: *Not currently used.* Specifies the highest level of the Private Network-to-Network Interface (PNNI) hierarchy that lies within the intraorganization scope.

Usage: When this parameter becomes available, you will specify a number from 0 to 104. The default value is 64.

Example: intra-organizaton = 64

Location: PNNI-Node-Config N > Node-Scope-Mapping

Intra-Regional

Description: *Not currently used.* Specifies the highest level of the Private Network-to-Network Interface (PNNI) hierarchy that lies within the interregional scope.

Usage: When this parameter becomes available, you will specify a number from 0 to 104. The default value is 32.

Example: intra-regional = 32

Location: PNNI-Node-Config N > Node-Scope-Mapping

Intra-site

Description: *Not currently used.* Specifies the highest level of the Private Network-to-Network Interface (PNNI) hierarchy that lies within the intrasite scope.

Usage: When this parameter becomes available, you will specify a number from 0 to 104. The default value is 80.

Example: intra-site = 80

Location: PNNI-Node-Config N > Node-Scope-Mapping

Invalid-Intervals

Description: Indicates the number of 15-minute intervals for which no valid data is available.

Usage: Valid range for this read-only parameter is from 0 (zero) to 96.

Example: invalid-intervals = 0

Location: DS1-ATM-Stat { shelf-*N* slot-*N N*} > IMA-Link-Status

See Also: Far-End-Rx-Failure-Status, Far-End-Rx-Link-State, Near-End-Rx-Failure-Status, Relative-Delay, Valid-Intervals

IP-Address

Description: Indicates or specifies an IP address, depending on its profile.

Usage:

- In an IP-Interface profile specify an IP address for an Ethernet interface in dotted decimal notation.

- In an Error profile the IP-address parameter is read only and indicates the address or subnet from which an operator reset was requested. The default is 0.0.0.0.

Example: `set ip-address = 10.2.3.4/24`

Location: Error, IP-Interface {{shelf-*N* slot-*N N*} *N*}

See Also: Host-Name, IP-Direct, IP-Route (profile), IP-Routing-Enabled

IP-Answer

Description: A subprofile that specifies default settings for IP calls, regardless of their encapsulation protocol.

Usage: With Answer-Defaults as the working profile, list the IP-Answer subprofile. For example:

```
admin> list ip-answer
[in ANSWER-DEFAULTS:ip-answer]
enabled=yes
vj-header-prediction=yes
routing-metric=1
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: Answer-Defaults

See Also: Routing-Metric, VJ-Header-Prediction

IP-Direct

Description: Specifies the address to which the Stinger unit immediately directs all incoming IP traffic on the link, without consulting the IP-routing table. If you enable RIP updates in both directions, the Stinger unit forwards all RIP packets to the IP address you specify.

Usage: Specify an IP address in dotted decimal notation. The default is 0.0.0.0, which disables IP-Direct routing.

Example: `set ip-direct = 10.1.2.3/24`

Dependencies: When you use IP-Direct routing, a remote user cannot establish a Telnet session directly to the Stinger unit.

Location: Connection *station* > IP-Options

See Also: IP-Address, IP-Options, IP-Route (profile), IP-Routing-Enabled

IP-Global (profile)

Description: A profile that configures global settings for TCP/IP.

Usage: Use the Read and List commands to make IP-Global the working profile and list its contents. For example:

```
admin> read ip-global
IP-GLOBAL read

admin> list
[in IP-GLOBAL]
domain-name=abc.com
system-ip-addr=0.0.0.0
rip-policy=poison-rvrs
summarize-rip-routes=no
bootp-enabled=no
ignore-icmp-redirects=no
drop-source-routed-ip-packets=no
ignore-def-route=yes
rarp-enabled=no
udp-cksum=yes
tcp-timeout=0
dialout-poison=no
telnet-password=""
user-profile=""
static-pref=100
rip-pref=100
rip-tag=c8:00:00:00
sec-domain-name=""
icmp-reply-directed-bcast=yes
bootp-relay=[ no bootp-servers { 0.0.0.0 0.0.0.0 }]
suppress-host-routes=no
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
IP-GLOBAL written
```

See Also: BOOTP-Enabled, Dialout-Poison, Domain-Name, Drop-Source-Routed-IP-Packets, ICMP-Reply-Directed-Bcast, Ignore-Def-Route, Ignore-ICMP-Redirects, RARP-Enabled, RIP-Policy, RIP-Pref, RIP-Tag

IP-Interface (profile)

Description: Configures an IP interface.

Each packet-handling slot module operates as a router subsystem with its own local interface table. The Stinger unit router module holds the global interface table. The interface address of an IP-Interface profile is the local address on a module. Each interface has its own IP address. When the Stinger unit generates IP packets, the packets have the source address of the IP

interface on which they are forwarded. If the Stinger unit receives IP packets destined for one of its IP addresses, it accepts the packets, even if they arrive on a different interface and the destination-address interface is not active.

Usage: You can specify up to 16 IP-Interface profiles for an Ethernet port. Each profile specifies a single IP address.

The Stinger unit creates a default IP-Interface profile when it first detects the presence of the shelf-controller Ethernet port. For example, for the first Ethernet port on a module in shelf 1, slot 12, the default IP-Interface profile uses the following index:

```
{{1 12 1} 0}
```

The index consists of a physical address and a logical-item number in the following format:

```
{{shelf slot item} logical-item}
```

The logical item number addresses a specific logical interface or port. The logical item number is 0 (zero), except when you configure multiple interfaces or the device supports multiple channels. For example, another IP-Interface profile for {1 12 1} might use the following index:

```
{{1 12 1} 1}
```

The logical-item numbers do not have to be consecutive, but they must be unique.

The Stinger unit supports a soft IP interface, which is an internal interface that never goes down. The IP-Interface profile with the zero index is reserved for the soft interface. As long as one of the Stinger unit IP interfaces is up, the soft interface address is reachable. The soft IP interface is associated only with the primary CM, regardless of which slot is operating as primary. The soft interface is hidden from the secondary CM. When the system powers on, it waits until a controller becomes the primary CM before setting up the soft interface. If a switchover occurs (so the secondary CM becomes primary), the system reinitializes the soft interface at that time.

If RIP is enabled, the Stinger unit advertises the interface address as a host route with a mask of /32 using the loopback interface. If RIP is not enabled, routers one hop away from the Stinger unit must have a static route to the soft interface address. The following commands set the soft interface IP address to 1.1.1.128/24:

```
admin> read ip-interface { 0 0 0 }
IP-INTERFACE/{ { any-shelf any-slot 0 } 0 } read

admin> set ip-addr=1.1.1.128/24

admin> write
IP-INTERFACE/{ { any-shelf any-slot 0 } 0 } written
```

Dependencies: Consider the following:

• For IP-Interface profiles, the default profile (with the zero logical-item number) must have an IP address configured, or none of the other IP-Interface profiles for the same port will function. Do not delete the default profile if you want your other configurations to work.

• If Proxy-Mode is enabled in any of the IP-Interface profiles for a given Ethernet port, it is enabled for all ARP requests coming into the physical port.

See Also: Directed-Broadcast-Allowed, Interface-Address, IP-Address, Management-Only-Interface, Proxy-Mode, RIP-Mode

IP-Options

Description: A subprofile configuring IP-routing settings.

Usage: With a Connection profile as the working profile, list the IP-Options subprofile. For example:

```
admin> list ip-options
[in CONNECTION/tim:ip-options]
ip-routing-enabled=yes
vj-header-prediction=yes
remote-address=0.0.0.0/0
local-address=0.0.0.0/0
routing-metric=7
preference=100
down-preference=255
private-route=no
temporary-route=no
ip-direct=0.0.0.0
rip=routing-off
client-default-gateway=0.0.0.0
if-remote-address=0.0.0.0
tos-options={ no 00 normal input }
source-ip-check=no
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: Connection *station*

See Also: Apply-To, Client-Default-Gateway, Down-Preference, IP-Direct, IP-Routing-Enabled, Local-Address, Precedence, Preference, Private-Route, Remote-Address, RIP, Routing-Metric, Source-IP-Check, Temporary-Route, Type-of-Service, VJ-Header-Prediction

IP-Route (profile)

Description: A profile configures the settings required by the IP router for setting up static routes. The Stinger unit passes the static routes to the router at startup, and updates the routing table whenever a route changes.

Usage: Use the Read and List commands to make IP-Route the working profile and list its contents. For example:

```
admin> read ip-route default
IP-ROUTE/default read

admin> list
[in IP-ROUTE/default]
name*=default
dest-address=0.0.0.0/0
gateway-address=0.0.0.0
metric=1
cost=1
```

```
preference=100
third-party=no
private-route=yes
active-route=no
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
IP-ROUTE/default written
```

See Also: Active-Route, Gain-Default, Metric, Nailed-Up-Group, Preference, Private-Route

IP-Routing-Enabled

Description: Specififes whether the routing of IP data packets for the connection is enabled or disabled.

Usage: When this parameter becomes available, you will be able to specify one of the following values:Valid values are as follows: Yes—Specifies No—Specifies

Usage: Specify Yes or No. The default is Yes.

- Yes—Specifies IP routing for the link. For your setting to have any effect, IP routing must be enabled on both the dialing and answering sides of the link. This is the default.

- No—Specifies IP routing for the link is not enabled.

Example: set ip-routing-enabled = no

Location: Connection *station* > IP-Options

See Also: IP-Address, IP-Global (profile), IP-Interface (profile), IP-Options, IP-Route (profile)

IS-Post

Description: Indicates whether the error specified in the Error profile occurred during a Power-On Self Test (POST).

Usage: The IS-Post setting is read only. Yes indicates that the error occurred during a POST. No indicates that the error did not occur during a POST.

Example: is-post = no

Location: Error

See Also: Index, IP-Address, Loadname, Stack-Trace, User (profile)

Item-Number

Description: Specifies an item on a line interface or trunk module. Items are numbered starting with 1 for the leftmost item on the module.

Usage: Specify a number from 0 to 65535. The default is 0 (zero), which denotes the entire slot.

Example: set item-number = 24

Location: Device-Address, Physical-Address

See Also: Device-Address, Physical-Address, Shelf

L

LASR

Description: Specifies whether link addition and slow recovery (LASR) procedures are enabled or disabled.

Usage: Valid values are as follows:

- `Yes`—Specifies that LASR is enabled. This is the default.
- `No`—Specifies that LASR is disabled.

Example: set lasr = no

Location: IMAGroup *name*

See Also: Rx-Min-Num-Links,TPP-Test-Link, TPP-Test-Pattern, Tx-Min-Num-Links

Last-Change-Time

Description: The number of seconds or milliseconds that have lapsed since the inverse multiplexing ATM (IMA) group last changed state.

Usage: Valid range is from zero to 2147483647

Example: set last-change-time = 1320

Location: IMA-Group-Stat *name*

See Also: Diff-Delay-Max-Obs, Failure-Status, Far-End-IMA-Group-State, Near-End-IMA-Group-State, Running-Secs, Rx-Num-Active-Links, Tx-Num-Active-Links

Leadership-Priority

Description: Specifies a number representing the leadership priority value the node will advertise to the peer group in a Private Network-to-Network Interface (PNNI).

Usage: The default zero value is required for nodes that are not peer group leader/logical group node (PGL/LGN) capable.

Example: leadership-priority = 0

Location: PNNI-node-config *N* > Node-Pgl

See Also: Init-Time, Override-Delay, Parent-Node-Index, Reelect-Time

Least-Delay-Link

Description: Indicates the index of the link configured in the inverse multiplexing ATM (IMA) group which has the smallest link propagation delay.

Usage: Valid range is from zero to 24. The distinguished value of zero is used if no link has been configured in the IMA group, or if the link with the smallest link propagation delay has not yet been determined.

Example: `least-delay-link = 0`

Location: IMA-GROUP -Stat > IMA-Rt

See Also: Rx-Num-Active-Links, Rx-Num-Config-Links, Rx-Timing-Ref-Link, Tx-Timing-Ref-Link, TPP-Test-Link, Tx-Num-Active-Links, Tx-Num-Config-Links

Left-Status

Description: Specifies the default content of the left side of the status window.

Usage: Valid values are as follows:

- `Session-List`—Specifies that the Stinger unit displays current system administration sessions on the left side of the status window.

- `Connection-List`—Specifies that the Stinger unit displays current system WAN sessions on the left side of the status window. This is the default.

Example: `set left-status = session-list`

Location: User *name*

See Also: Bottom-Status, Default-Status, Top-Status

Length

Description: The number of bytes in a specified address. Length is used in a specific way in each profile or subprofile

Usage: Specify the Length in one of the following ways, depending upon the profile and subprofile

- In the ATM-Addr-Alias—Number of bytes in the aliased address (from 0 to 22 bytes).

- In thePNNI-Node-Prefix subprofile of the ATM-Prefix profile—Length in number of bytes of the prefix portion of the PNNI node address. By default, the prefix is 13-bytes, which is consistent with the DCC-AESA format. The valid range is from 1 to 13.

- In the SPVC-Addr-Prefix subprofile of the ATM-Prefix profile—Length in number of bytes of the prefix portion of the SPVC target address. With the default zero setting, the value is taken from the PNNI-Node-Prefix Profile Length setting. The valid range is from 0 to 13.

- In the SVC-Addr-Prefix subprofile of the ATM-Prefix profile—Length in number of bytes of the prefix portion of the SVC interface address. With the default zero setting, the value is taken from the PNNI-Node-Prefix profile Length setting. The valid range is from 0 to 13.

Example: (in the ATM-Addr-Prefix profile):

```
set length = 22
```

Location: ATM-Addr-Alias, ATM-PREFIX *name* > PNNI-Node-Prefix, ATM-PREFIX *name*> SPVC-Addr-Prefix, ATM-PREFIX *name* > Svc-Addr-Prefix

See Also: Bandwidth-Monitor-Direction, Base-Channel-Count, Decrement-Channel-Count, Dynamic-Algorithm, Increment-Channel-Count, Maximum-Channels, Minimum-Channels, Seconds-History, Summarize-RIP-Routes, Target-Utilization, Alias-Name

LIM-Sparing-Config (profile)

Description: Configures line interface module (LIM) sparing and designates the primary and secondary LIM.

Usage: Use the Read and List commands to make LIM-Sparing-Config the working profile:

```
admin> read lim-sparing-config
LIM-SPARING-CONFIG read

admin> list
[in LIM-SPARING-CONFIG/{ any-shelf any-slot 0 } (new)]
physical-address* = { any-shelf any-slot 0 }
spare-slot-type = unknown
sparing-mode = inactive
spare-slot-number = slot-16
manually-spared-slot-number = any-slot
auto-lim-sparing-config = { [ { yes 10 100 3 12 } { yes 10 100 3
12 } { yes 10 +
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
LIM-SPARING-CONFIG written
```

See Also: Manually-Spared-Slot-Number, Spare-Slot-Number, Sparing-Mode

LIM-Sparing-Enabled

Description: Specifies whether the line interface module (LIM) sparing trap should to be sent to the identified host.

Usage: Valid values are as follows:

- Yes—Specifies that LIM sparing trap should be sent to the identified host.

- No—Specifies that LIM sparing trap should not be sent to the identified host. This is the default.

Example: set lim-sparing-enabled = yes

Dependencies: Only when this parameters is set to no can the Stinger unit report traps (notifications) to an SNMP agent.

Location: TRAP *name*

See Also: Interface-Sparing Enabled

LIM-Sparing-Status (profile)

Description: A read-only profile that indicates whether line interface module (LIM) sparing is enabled, as well as the slot numbers of the primary and secondary LIMs.

Usage: Use the Read and List commands to make LIM-Sparing-Status the working profile. Following is a listing of the profile which includes a listing of the 16-element array subprofile named LIM-Sparing-Status, giving LIM-status settings for each LIM.

```
admin> read lim-sparing-status
LIM-SPARING-STATUS read
admin> list
[in LIM-SPARING-STATUS]
spare-slot-type = none
sparing-mode = inactive
spare-slot-number = any-slot
spared-slot-number = any-slot
sparing-change-reason = unknown
sparing-change-time = 0
sparing-change-counter = 0
lim-sparing-status = [ { yes yes sparing-none } { yes yes sparing-none
} { yes +
admin> list lim-sparing-status 1
[in LIM-SPARING-STATUS:lim-sparing-status[1]]
active = yes
lim-status-ok = yes
sparing-state = sparing-none
```

LIM-sparing-Status *N*

Description: One of 16 port subprofiles indicating the status of LIM redundancy on a given LIM.

Example: Use the Dir and List commands to list Lim-Sparing-Status *N*.

```
mitch-admin->lis lim-sparing-status 1
[in LIM-SPARING-STATUS:lim-sparing-status[1]]
active = yes
lim-status-ok = yes
sparing-state = sparing-none
```

Location: LIM-Sparing-Status

LIM-Status-Ok

Description: Indicates the status of LIM sparing for a given LIM.

Usage: Valid values are as follows:

• Yes—Indicates that the LIM sparing for this port is properly working. This is the default.

• No—Indicates that LIM sparing for this port is not properly working.

Example: set LIM-status-ok = yes

Location: LIM-Sparing-Status

See Also: Sparing-State

Line-Build-Out

Description: Specifies the line buildout value for connecting to channel service unit (CSU) devices.

Usage: Valid values are as follows:

- `0-db`– This is the default.
- `7.5-db`
- `15-db`
- `22.55-db`

Dependencies: For this setting to apply, you must set the Front-End-Type parameter to `long-haul`.

Example: set line-build-out = 15-db

Location: DS1-ATM { shelf-N slot-N N } > line-config

See Also: Channel-Config N, Front-End-Type, Line-Build-Out, Line-Length

Line-Code

Description: Specifies the Discrete MultiTone (DMT) line code to be used for training.

Usage: Valid values are as follows:

- `auto select`—Enables automatic detection of the ADSL line coding. This is the default value for any line interface module (LIM) except the ADSL 48-port LIM. This is the default.
- `ansi-dmt`—Sets line code to ANSI-DMT line-code. Select for optimum performance when configuring a 12-port LIM to ANSI DMT.
- `g.lite`—Sets the line code to G.lite line-code. Line code is automatically set to this when you have the ADSL 48-port LIM.
- `g.dmt`—Sets the line code to G.dmt line-code.
- `legacy-mode`—For 24-port ADSL LIMs only. Allows training to legacy Alcatel devices such as the CopperCom MXR integrated access device (IAD) modem.

Example: line-code = auto-select

Location: AL-DMT {shelf-*N* slot-*N N*} > Line-Config

See Also: Line-Latency-Down, Line-Latency-Up

Line-Config

Description: A subprofile in an AL-DMT, OC3-ATM, ATM-DS3, or SDSL module that configures the corresponding line interface module (LIM).

Usage: With AL-DMT, OC3-ATM, DS3-ATM, or SDSL as the working profile, list the Line-Config subprofile. For example:

```
admin> list line-config
[in SDSL:line-config]
trunk-group=0
nailed-group=2
activation=static
data-rate-mode=singlebaud
max-rate=784000
unit-type=coe
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: AL-DMT {shelf-*N* slot-*N N*}, OC3-ATM {shelf-*N* trunk-module-*N N*}, DS3-ATM {shelf-*N* slot-*N N*}, SDSL {shelf-*N* slot-*N N*}

See Also: Nailed-Group

Line-Diag (profile)

Description: Configures line testing settings.

Usage: Use the Dir, Read, and List commends to make this the current profile, as in this example:

```
techpubs> dir line-diag
0  10/30/2000 18:07:20  { shelf-1 slot-12 1 }
techpubs> read line-diag  { shelf-1 slot-12 1 }
LINE-DIAG/{ shelf-1 slot-12 1 } read
techpubs> list
[in LINE-DIAG/{ shelf-1 slot-12 1 }]
physical-address* = { shelf-1 slot-12 1 }
bert-timer = 1 minute
bert-enable = no
```

Line-Diag-Stat (profile)

Description: Indicates the state of the line diagnostics set in the Line-Diag profile.

Usage: Use the Dir, Read, and List commands to make this the current profile, as in this example:

```
techpubs> dir line-diag-stat
0  10/30/2000 18:07:20  { shelf-1 slot-12 1 }
techpubs> read line-diag-stat  { shelf-1 slot-12 1 }
LINE-DIAG-STAT/{ shelf-1 slot-12 1 } read
techpubs> list
```

```
[in LINE-DIAG-STAT/{ shelf-1 slot-12 1 }]
physical-address* = { shelf-1 slot-12 1 }
bert-operation-state = stopped
bert-error-counter = 0
```

Line-Interface

Description: A subprofile that configures an ISDN digital subscriber line (IDSL).

Usage: Once you have made IDSL the current profile, enter the command List Line-Interface, as in the following example.

```
admin> list line-interface
[in IDSL/{ shelf-1 slot-13 5 }:line-interface]
enabled = no
dual-link = no
channel-config = [ { switched-channel 605 } { switched-channel
605 } ]
dial-plan = 0
answer-number-1 = ""
answer-number-2 = ""
clock-source = eligible
idsl-bandwidth = idsl-128
```

Line-Latency-Down

Description: Specifies the latency path for downstream data transport.

Usage: Valid values are as follows:

- Fast—specifies noninterleaved channels.
- Interleave—Specifies interleaved channels.

Default value is interleave for G.lite and fast for all other line codings.

Example: set line-latency-down = fast

Dependencies: The fast-path-config profile values are not relevant to the 48-port LIM configuration because fast latency is not available for that configuration.

Location: AL-DMT {shelf-*N* slot-*N N*} > Line-Config

See Also: Line-Latency-Up

Line-Latency-Up

Description: Specifies the latency path for upstream data transport.

Usage: Valid values are as follows:

- Fast—specifies non-interleaved channels.
- Interleave—Specifies interleaved channels.

Default value is interleave for G.lite and fast for all other line codings.

Example: `set line-latency-up = fast`

Dependencies: The `fast-path-config` profile values are not relevant to the 48-port LIM configuration because fast latency is not available for that configuration.

Location: AL-DMT {shelf-*N* slot-*N N*} > Line-Config

See Also: Line-Latency-Down

Line-Length

Description: Specifies the length of the physical line in feet for connecting to short-haul digital cross-connect (DSX) devices.

Usage: Valid values are as follows:

*   `1-133`—Equivalent to 0.3m to 40.5m. This is the default.
*   `134-266`—Equivalent to 40.8m to 81.1m.
*   `267-399`—Equivalent to 81.4m to 121.6m.
*   `400-533`—Equivalent to 121.9m to 162.5m.
*   `534-655`—Equivalent to 162.8m to 199.6m.

Dependencies: This parameter replaces the Max-Cable-Loss parameter in the DS1-ATM profile. While the Line-Length and Max-Cable-Loss parameters have the same valid values, you must reapply the value set in the Max-Cable-Loss parameter to the Line-Length parameter for the setting to apply.

Note: This parameter does not apply if the Front-End-Type parameter is set to long-haul.

Example: `set line-length = 1-133`

Location: DS1-ATM { shelf-N slot-N N } > line-config

See Also: Front-End-Type, Line-Build-Out, Front-End-Type, Line-Length

Line-Mode

Description: Indicates whether the mode in which this line is operating is use-to-network-interface (UNI) or inverse multiplexing ATM (IMA).

Usage: Valid values areas follows:

*   `uni`— Link operates in UNI mode
*   `ima`—Link operates in IMA mode

Example: `set line-mode = uni`

Location: DS1-ATM-Stat { shelf-N slot-*N N*}

See Also: IMA-Link-Status, IMA-Link-Statistic, Line-State, Network-Loopback

Line-Quality

Description: Indicates the line quality (in decibels). For an SDSL interface, a reading of -5dB or better is required for reliable data transfer.

Usage: The Line-Quality setting is read only.

Location: SDSL-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Far-End-dB-Attenuation, Line-Up-Timer, Physical-Address, Rx-Signal-Present, Self-Test, Up-Down-Cntr

Line-Rate

Description: Indicates the maximum data rate for this port.

Usage: Read-only value.

Example: `line-rate = 155520`

Location: ATM-Config > Trunk-Cac-Config

See Also: Port-Num, Over-Subscription

Line-State

Description: Indicates the overall state of a line.

Usage: The Line-State setting is read only. You cannot set Line-State directly. For a RADSL or an ADSL line, Line-State can have one of the following values:

Value	Indicates
disabled	The line is disabled.
active	The line is up and operating normally.

For an SDSL or an HDSL line, Line-State can have one of the following values:

Value	Indicates
does-not-exist	The line is not installed.
disabled	The line is disabled.
active	The line is up and operating normally. Multipoint connection established (for HDSL).

For an IDSL line, Line-State can have one of the following values:

Value	Indicates
disabled	Line disabled.

Value	Indicates
no-physical	No physical link.
point-to-point	Point to point established.

For a DS3-ATM or an OC3-ATM line, the state can have one of the following values:

Value	Indicates
does-not-exist	No link has been established.
disabled	The line is disabled.
loss-of-signal	A red-alarm state has occurred. Indicates a near end loss of signal.
loss-of-frame	A framing error has occurred on the near end.
yellow-alarm	A device on the line is detecting framing errors in the signal. Indicates far end loss of frame.
ais-receive	The line is receiving a keepalive signal.
active	The line is enabled.

Example: line-state = active

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} ATM-Internal -Stat {*N N N*}, DS3-ATM {shelf-*N* slot-*N N*}, IDSL-Stat, OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}, SDSL-Stat {shelf-*N* slot-*N N*}, HDSL2-Stat { shelf-*N* slot-*N N*}

Line-Up-Timer

Description: Indicates the length of time the line has been in the up state.

Usage: The Line-Up-Timer value is read only. It has the following format:

{*hh mm ss*}

where *hh* is the number of hours, *mm* is the number of minutes, and *ss* is the number of seconds

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Statistic, SDSL-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Far-End-dB-Attenuation, Physical-Address, Rx-Signal-Present, Self-Test, Up-Down-Cntr

Link-Compression

Description: Specifies the link-compression method for a Point-to-Point Protocol (PPP)-encapsulated packet transmitted and received on the connection.

Usage: Valid values are as follows::

- `none`—Specifies no link compression. In the Answer-Defaults profile, None is the default.

- `stac`—Specifies a modified version of draft 0 of the Compression Control Protocol (CCP), which predates RFC 1974. Older equipment supports this compression method. It is not recommended for use with IPX connections. In a Connection profile, Stac is the default.

- `stac-9`—Specifies draft 9 of the Stac LZS compression protocol, which is described in RFC 1974. Most devices use this compression method.

- `ms-stac`—Specifies Microsoft/Stac compression (the method used by Windows 95). If the caller does not acknowledge Microsoft/Stac compression, the Stinger unit attempts to use standard Stac compression. If the caller does not acknowledge Stac compression, the link uses no compression.

Example: `set link-compression = stac-9`

Dependencies: Only PPP, Multilink Protocol (MP), and Multilink Protocol Plus (MP+) links support Link-Compression. Both sides of the connection must specify the same type of link compression. Otherwise, your setting has no effect. By default, NetWare relies on the Data Link layer (also called Layer 2) to validate and guarantee data integrity. When you configure Stac compression, the system performs an 8-bit checksum, which is inadequate for NetWare data. Therefore, for NetWare connections, carry out one of the following tasks:

- Select Stac-9 or MS-Stac compression, which uses a more robust error-checking method.

- Disable link compression by setting Link-Compression to None. When you do so, the Stinger unit guarantees data integrity by means of PPP.

- Accept the default Stac setting, and enable IPX checksums on your NetWare servers and clients. Both the server and the client must support IPX checksums. If you enable checksums on your servers, but not on your clients, all logins will fail.

Location: Answer-Defaults > PPP-Answer, Connection station > PPP-Options

See Also: PPP-Options, VJ-Header-Prediction

LinkDown-Enabled

Description: Specifies whether the system generates a trap when a failure occurs in a communication link between the unit and the SNMP manager.

Usage: Valid values are as follows:

- `Yes`—Specifies that the system generates a trap when a failure occurs in a communication link between the unit and the SNMP manager. This is the default.

- `No`—Specifies that the system does not generate a trap when a failure occurs in a communication link between the unit and the SNMP manager.

Example: `set linkdown-enabled = no`

Location: Trap *host-name*

See Also: LinkUp-Enabled

Link-Mgmt

Description: Specifies the link management protocol between the Stinger unit and the Frame Relay switch. The Frame Relay administrator or service provider can tell you which value to use.

Usage: Valid values are as follows:

- `none`—Specifies no link management. The Stinger unit assumes that the physical link is up and that all Data Link Connection Indicators (DLCIs) are active on the physical link. This is the default.

- `ANSI-T1.617d`—Specifies the link management protocol defined in ANSI T1.617 Annex D.

- `CCITT-Q.933a`—Specifies the link management protocol defined Q.933 Annex A.

To ensure interoperability with equipment from different vendors, the same version of management protocol must be used at each end of the Frame Relay link.

Example: `set link-mgmt = ansi-t1.617d`

Location: Frame-Relay *fr-name*

See Also: DCEN393-Val, G, Link-Type, N391-Val, N392-Val, N393-Val, T397-Ms, T392-Val

Link-Mgmt-DLC

Description: Specifies the data link connection indicator (DLCI) to use for link management on the Frame Relay data link.

Usage: Valid values are as follows:

- `DLCI0`—This is the default)

- `DLCI1023`

Example: `set link-mgmt-dlci = dlci1023`

Dependencies: For switched virtual channels (SVCs), `dlci0` is required.

Location: Frame-Relay *fr-name*

See Also: Link-Mgmt

Link-Recovery-Type

Description: Specifies the type of link recovery.

Usage: Valid values are

- `manual`—Link recovery type is manual

- `slow`—Link recovery type is slow

- `fast`—Link recovery type is fast

Example: set link-recovery-type = slow

Location: DS1-ATM {shelf-*N* slot-*N*} > Online-Config > ima-option-config

See Also: Add-Link-Cond-Time, Fault-Clearing-Time, Fault-Clearing-Type

Link-State

Description: Indicates the physical state of the LAN interface.

Usage: The Link-State setting can be Up, Down, or Unknown. The value can only be set by the Ethernet driver.

- up—Indicates that the LAN interface can transmit and receive network traffic.
- down—Indicates that the LAN interface cannot transmit and receive network traffic (for example, if the Ethernet cable is unplugged or the Ethernet hub on the interface is down).
- unknown—Indicates the shelf-controller Ethernet interface.

Location: Ether-Info {shelf-*N* slot-*N N*}

See Also: Down-Preference, Link-State-Enabled, MAC-Address

Link-State-Enabled

Description: Specifies whether the value of Link-State affects the IP routing tables.

Usage: Valid values are as follows:

- Yes—Specifies that the Stinger unit deletes routes to an interface when Link-State is Down, and adds them when the interface comes up again. This is the default.
- No—Specifies that the Stinger unit routes packets to an interface regardless of the Link-State setting. If the interface is down, the Stinger unit discards the packets. They cannot use an alternative route.

Example: set link-state-enabled = yes

Location: Ethernet {shelf-*N* slot-*N N*}

See Also: Line-State

Link-Type

Description: Specifies the kind of logical interface between the Stinger unit and the Frame Relay network on the datalink:

- Data Circuit-Terminating Equipment (DCE) is a device that connects the DTE (Data Terminal Equipment) to a communications channel, such as a telephone line.
- Data terminating equipment (DTE) is a device that an operator uses, such as a computer or a terminal.
- Network-to-Network Interface(NNI) operation allows the Stinger unit to act as a Frame Relay switch communicating with another Frame Relay switch.

Usage: Specify one of the following values:

- DCE—Specifies a UNI-DCE connection. The Stinger unit operates as the network side, communicating with the user side (UNI-DTE) of a Frame Relay terminating unit.

- DTE—Specifies a UNI-DTE connection. The Stinger unit operates as the user side, communicating with the network-side DCE switch. This is the default.

- NNI—Specifies an NNI connection. The Stinger unit performs both DTE and DCE link management.

Example: set link-type = dce

Location: Frame-Relay *fr-name*

See Also: DCEN393-Val, N391-Val, N392-Val, N393-Val, T397-Ms, T392-Val

LinkUp-Enabled

Description: Specifies whether the system generates a trap when the communication link between the unit and the SNMP manager comes back up.

Usage: Valid values are as follows:

- Yes—Specifies that the system generates a trap when the communication link between the unit and the SNMP manager comes back up. This is the default.

- No—Specifies that the system does not generate a trap when the communication link between the unit and the SNMP manager comes back up.

Example: set linkup-enabled = no

Location: Trap *host-name*

See Also: LinkDown-Enabled

Loadname

Description: Indicates the name of the software load that was running on a slot that failed.

Usage: The Loadname setting is read only.

Example: loadname = load1

Location: Error

See Also: Index, IP-Address, IS-Post, Stack-Trace, User-Profile

Load-Select (profile)

Description: A profile that configures which modules images to load to flash memory when you use a Load Tar command.

Following a system reset, the Stinger unit creates the Load-Select profile, if it is not present. The profile lists the entire set of supported module images and an intended load action for each module type when the image is present in a Tar file. It also contains an Unknown-Cards setting, which represents new module that were not supported in the previous system version. When loading the Tar file, the system uses settings in the Load-Select profile to load only specific module images. To prevent version-related problems, the system then deletes code images that were present on the flash module but were not updated.

Usage: Use the Read and List commands to make Load-Select the working profile and list its contents. For example:

```
admin> new load-select
LOAD-SELECT read
admin> list
[in LOAD-SELECT (new)]
unknown-cards = auto
sdsl-atm = auto
al-dmtadsl-atm = auto
sdsl-atm-v2 = auto
dadsl-atm-24 = auto
glite-atm-48 = auto
hdsl2 = auto
annexb-dmtadsl = auto
t1000 = auto
ima = auto
stngr-32-idsl = auto
40-dmt-adsl = auto
48-dmt-adsl = auto
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
LOAD-SELECT written
```

Note: An explicit Load command for a particular module type overrides the settings in the Load-Select profile.

See Also: DS3-ATM, Detect-End-Of-Packet, Force-56Kbps, Host, HostN, Port, Facility, Host, Immediate-Mode-Options, Save-Number, Service, Syslog-Enabled, Enet2, SDSL, UDS3, Unknown-Cards

Local-Address

Description: Specifies an IP address for the local side of a numbered-interface connection.

Usage: Specify an IP address in dotted decimal notation. Separate the optional subnet mask from the address by entering a forward slash. The address must be unique to the connection. You can assign a fake IP address or an IP address from one of the local subnets. The Stinger unit accepts IP packets destined for the specified address and treats them as destined for the

system itself. The packets might arrive on any interface, and the destination numbered interface need not be in the active state. The default is 0.0.0.0, which indicates an unnumbered interface.

Example: `set local-address=10.2.3.4/24`

Dependencies: The Local-Address value cannot be an address assigned in an IP-Interface profile to one of the unit's physical LAN interfaces, nor can it be the IP address of the shelf-controller Ethernet port.

Location: Connection *station* > IP-Options

See Also: IP-Options, Remote-Address

Local-Echo

Description: Specifies the local-echo mode for a terminal-server session. Local-echo mode is a line-by-line mode. The line appears as the user types it, but is not transmitted until the user enters a carriage return. If local echo is enabled, the line transmitted is echoed on the local Stinger unit terminal screen. Local echo allows Stinger unit terminal-server users to connect to nonstandard Telnet ports and programs. If the remote server turns local echo on or off in its option negotiation for a Telnet session, the negotiated setting overrides the value of Local-Echo.

Usage: Valid values are as follows:

- `Yes`—Turns on local echo.
- `No`—Disables local echo. This is the default.

Example: `set local-echo=yes`

Dependencies: If terminal services are disabled, Local-Echo does not apply. A terminal-server user can override the Local Echo setting from the command line by using the `-e` option of the Telnet command.

Location: Terminal-Server > Terminal-Mode-Configuration > Telnet-Options

See Also: Telnet-Options, Terminal-Mode-Configuration

Local-Net

Description: *Not currently used.* Indicates the local-net number representing the highest level of the Private Network-to-Network Interface (PNNI) hierarchy that lies within the local network scope. See the Node-Scope-Mapping subprofile for more information.

Usage: Valid range is from 0 to 104. The default value is 96.

Example: `Local-Net = 96`

Location: PnNNI-Node-Config *N* > Node-Scope-Mapping

Local-Net-Plus-1

Description: *Not currently used.* Indicates the local-net number representing the highest level of the Private Network-to-Network Interface (PNNI) hierarchy that lies within the local network plus 1 scope. See the Node-Scope-Mapping subprofile for more information.

Usage: Valid range is from 0 to 104. The default value is 96.

Example: `Local-Net-Plus-1 = 96`

Usage: PnNNI-Node-Config *N* > Node-Scope-Mapping

See Also: Node-Scope-Mapping

Local-Net-Plus-2

Description: *Not currently used.* Indicates the local-net number representing the highest level of the Private Network-to-Network Interface (PNNI) hierarchy that lies within the local network plus 2 scope. See the Node-Scope-Mapping subprofile for more information.

Usage: Valid range is from 0 to 104. The default value is 96.

Example: `Local-Net-Plus-2 = 96`

Location: PnNNI-Node-Config *N* > Node-Scope-Mapping

See Also: Node-Scope-Mapping

Local-Profiles-First

Description: Specifies whether the Stinger unit attempts local authentication before remote external authentication.

Usage: Valid values are as follows:

Usage: Specify one of the following settings:

- `LPF-Yes`—Specifies that the Stinger unit first attempts to authenticate the connection with a local profile. If the profile exists and the password matches, the Stinger unit allows the connection. If no local profile exists or if a local profile exists but the password fails, the Stinger unit tries to authenticate the connection through an external authentication server. This is the default.

- `LPF-No`—Specifies that the Stinger unit first tries to authenticate the connection through a remote authentication server. If the server acknowledges the request, it allows the connection. If the server does not acknowledge (NAKs) the request and remote authentication fails (because no remote profile exists, or a remote profile exists but the password fails), or if the remote authentication server cannot be reached, the Stinger unit attempts to authenticate the connection with a local profile.

- `LPF-RNo` —Specifies that the Stinger unit first tries to authenticate the connection through a remote authentication server. If the profile exists and the password matches, the Stinger unit allows the connection. If the server doesn't respond, the Stinger unit checks for a matching local profile. If the server does not acknowledge (NAKs) the request and remote authentication fails, the Stinger unit terminates the connection.

Example: `set local-profiles-first = lpf-no`

Dependencies: Consider the following:

- If `Auth-Type = None`, Local-Profiles-First does not apply.
- PAP-Token authentication does not produce a challenge with a local profile. Using a local profile defeats the security of using PAP-Token.
- When you use a local profile, PAP-Token-CHAP brings up one channel, but all other channels fail.
- If the remote end of the connection has ever been authenticated with a challenge, Cache-Token does not work with a local profile. If the remote end has never been authenticated, no problem occurs when using a local profile.
- When you set `Local-Profiles-First = LPF-No`, the Stinger unit waits for the remote authentication to time out before attempting to authenticate locally. This timeout might take longer than the timeout specified for the connection and could cause all connection attempts to fail. Therefore, set the authentication timeout value low enough to guard against the line going down, but high enough to permit the unit to respond if it can. The recommended time is 3 seconds.

Location: External-Auth

See Also: Auth-Timeout, Auth-Type

Location

Description: Specifies the physical location of the Stinger unit. An SNMP manager can both read and set the Location value.

Usage: Specify text describing where the Stinger unit is located. You can enter up to 80 characters. The default is null.

Example: `set location = building-64`

Location: SNMP

See Also: Contact

Log (profile)

Description: Configures system-wide event-logging settings. System-wide event logging includes the Stinger unit log buffer accessed by the Log command, and any Syslog host designated by the Log profile. For information about the Log command, see "Log" on page 1-50.

Usage: Use the Read and List commands to make Log the working profile and list its contents. For example:

```
admin> read log
LOG read

admin> list
[in LOG]
save-level=info
save-number=100
```

```
call-info=none
syslog-enabled=no
host=0.0.0.0
port=514
facility=local0
log-call-progress=yes
log-software-version=no
syslog-level=info
log-call-progress=yes
log-software-version=no
auxiliary-syslog={ no debug 10.40.40.41 514 local0 }{ no +
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
LOG written
```

See Also: Auxiliary-Syslog, Call-Info, Facility, Host, Log-Software-Version, Save-Number, Syslog-Enabled

Log-Call-Progress

Description: Specifies whether the unit logs incoming call-progress messages.

Usage: Valid values are as follows:

- Yes—Specifies that the unit logs incoming call-progress messages. This is the default.

- No—Specifies that the unit discards incoming call-progress messages.

Example: set log-call-progress = no

Location: Log

See Also: Log-Display-Level, Log (profile)

Log-Display-Level

Description: Specifies the lowest level of the log messages that the Stinger unit displays to a logged-in user.

Usage: The following levels are arranged from the highest—starting with Emergency—to the lowest, Debug. Specify a level as the lowest level setting. The level you specify and all levels above that setting are displayed. For example, if critical is the lowest setting, only critical, Alert, and emergency level log messages are displayed.

- none—The Stinger unit does not display log messages.This is the default.

- emergency—The unit has an error condition and is unlikely to be operating normally.

- alert—The unit has an error condition but is still operating normally.

- critical—An interface has gone down or a security error has occurred.

- error—An error event has occurred.

- warning—An unusual event has occurred, but the unit is otherwise operating normally. For example, this type of message appears when a login attempt has failed because the user entered an incorrect user name or password.

- notice—Events of interest in normal operation have occurred (a link going up or down, for example).

- info—State and status changes that are commonly not of general interest have occurred.

- debug—Helpful debugging information.

Do not confuse Log-Display-Level with Save-Level in the Log profile. Save-Level determines which messages are displayed in the event-log status window.

Example: set log-display-level = debug

Location: User *name*

See Also: Log, Log (profile), Save-Level

Logical-Item

Description: Specifies a number that assigns an addressable logical entity within the context of a physical address.

Usage: Specify a number from zero (0) to 2147483647.

Example: set logical-item = 0

Location: Call-Route { { { shelf-*N* any-slot *N* } *N* } *N* } > Preferred-Source

See Also: Preferred-Source

Login-Prompt

Description: Specifies the string that acts as a prompt for a user name in the terminal-server interface.

Description: If Prompt-Format = No in the Terminal-Mode-Configuration subprofile, you can specify up to 15 characters, not including a newline or tab character.

If Prompt-Format = Yes, you can specify up to 80 characters in multiple lines by including the newline (\n) and tab (\t) characters. To include an actual backslash character, you must precede it with another backslash. For example, suppose you enter the following string:

Welcome to\n\t\\Lucent Remote Server\\\nEnter your user name:

The terminal server displays the following text as the login prompt:

```
Welcome to
    \Lucent Remote Server\
Enter your user name:
```

Regardless of the Prompt-Format setting, the default setting for Login-Prompt is Login:.

Example: set login-prompt = Login Name:

Dependencies: If terminal services are disabled, Login-Prompt does not apply.

Location: Terminal-Server > Terminal-Mode-Configuration

See Also: Password-Prompt, Prompt, Prompt-Format, Terminal-Mode-Configuration, Third-Login-Prompt, Third-Prompt-Sequence

Login-Timeout

Description: Specifies the number of seconds a user can wait to log into the terminal server. When a user attempts to log into the terminal server in terminal mode, a login prompt appears. If the user does not proceed any further than the login prompt within the number of seconds you specify, the login times out.

Usage: Specify a number of seconds from 0 to 300. The default is 300. If you set Login-Timeout to 0 (zero), the login never times out.

Example: `set terminal-mode-configuration login-timeout = 60`

Location: Terminal-Server > Terminal-Mode-Configuration

See Also: Password-Prompt, Prompt, Prompt-Format, Terminal-Mode-Configuration, Third-Login-Prompt, Third-Prompt-Sequence

Log-Software-Version

Description: Specifies whether the Stinger unit logs the system version number.

Usage: Specify Yes of No. The default is No.

Example: `set log-software-version = yes`

Location: Log

Loop-Attenuation

Description: Indicates current diminution (attenuation) in the loop, specified in decibels (dB).

Usage: This value is Read only.

Example: `loop-attenuation = 10`

Location: HDSL2-Stat { shelf-N slot-N N } > Physical-Statistic

See Also: BERT-Timer, Line-Up-Timer, Line-Quality, Rx-Signal-Present, Self-Test, Transmit-Power

Loopback

Description: Specifies whether to run a loopback test on the interface. While the interface is looped back, normal data traffic is interrupted.

Usage: Valid values are as follows:

• `no-loopback`—Specifies that no loopback test is run. This is the default.

- • `facility-loopback`—Specifies that during a facility loopback, the interface returns the signal it receives on the line.

- • `local-loopback`—Specifies that during a local loopback, the interface's receive path is connected to the interface's transmit path. The transmitted signal is still sent to the network as well.

Example: `set loopback = no-loopbac`k

Location: DS3-ATM {shelf-*N* trunk-module-*N N*} > Line-Config,
OC3-ATM {shelf-*N* trunk-module-*N N*} > Line-Config

Loop-Resistance

Description: Indicates the resistance registered in the loop during a copper loop test (CLT)

Usage: Resistance is reported in ohms.

Example: `loop-resistance = 0`

Location: CLT-Result

See Also: Loop-Resistance-Length-1

Loop-Resistance-Length-1

Description: Indicates the the estimated length of resistance for 22 AWG or .644 cable size.

Usage:
- • If units are set to `english`, length-1 is the estimated length in hundreths of a foot (.01) based on 22 AWG cable size.
- • If units are set to `metric`, length-1 is the estimated length in centimeters based on a .644 mm cable size.

Example: `loop-resistance-length-1 = 0`

Location: CLT-Result

See Also: Loop-Resistance

Loop-Resistance-Length-2

Description: Indicates the estimated length of resistance for 24 AWG or .511 cable size.

Usage:
- • If units are set to `english`, length-2 is the estimated length in hundreths of a foot (.01) based on 24 AWG cable.
- • If units are set to `metric`, length-2 is the estimated length in centimeters based on .511 mm cable size.

Example: `loop-resistance-length-2 = 0`

Location: CLT-Result

See Also: Loop-Resistance

Loop-Resistance-Length-3

Description: Indicates the estimated length of resistance for 26 AWG or .405 cable size.

Usage:

- If units are set to english, length-3 is the estimated length in hundreths of a foot (.01) based on 26 AWG cable size.
- If units are set to metric, length-3 is the estimated length in centimeters based on .405 mm cable size.

Example: loop-resistance-length-3 = 0

Location: CLT-Result

Location: Loop-Resistance

Loop-Resistance-Temp

Description: Specifies the temperature of loop in a copper loop test (CLT).

Usage: Specify a number according to the Loop-Resistance-Unit value you have specified:

- If english, specify 0 to 200 °F.
- If metric, specify frin -178°to 933° in tenths (.1) °C.

Example: set loop-resistance-temp = 80

Dependencies: Loop-Resistance-Unit must specify the type of unit.

Location: CLT-Result

See Also: Loop-Resistance

Loop-Resistance-Unit

Description: Specifies the unit of measurement for the for loop resistance test in a copper loop test (CLT).

Usage: Valid values are as follows:

- english—uses English units for test parameters.
- metric—uses metric units for test parameters.

Example: set loop-resistance-unit = metric

Dependencies: Loop-Resistance-Temp must specify the temperature.

Location: CLT-Command

See Also: Loop-Resistance

Loop-Timing

Description: Sets the source for transmission (TX) timing.

Usage: Valid values are as follows:

- Yes—Specifies that the TX timing for all the trunk ports, including this port, are derived from the receiver inputs of the port.

- No—Specifies that the TX timing is derived from the reference clock. This is the default.

Example: set loop-timing = yes

Location: OC3-ATM {shelf-N trunk-module-N N} > Line-Config

See Also: Clock-Source, Loop-Timing

Loss-Detect-Interval

Description: Specifies the number of seconds between successive transmissions of interim link management interface (ILMI) messages on this interface for the purpose of detecting loss of ILMI connectivity.

Usage: When this parameter becomes available valid settings are from 0 to 65535, with a default of 5 seconds. If this parameter is set to 0, ILMI connectivity procedures are disabled on the interface. *ILMI is not supported with the current software version.*

Example: set loss-detect-interval = 5

Location: ATM-If-Config { { any-shelf any-slot *N* } *N* } > Extension-Config

See Also: ILMI-Admin-Status, ILMI-VCI

Loss-of-Carrier

Description: Indicates a loss of carrier on the DS1 ATM line.

Usage: Valid values are as follows:

Usage:

- false—Indicates no loss of carrier.

- true—Indicates a loss of carrier.

Example: loss-of-carrier = False

Location: DS1-ATM-Stat { shelf-*N* slot-*N N*}

See Also: Ber-Receive, Carrier-Established, Cell-Delineation, IMA-Link-Statistic, IMA-Link-Status, Line-State

Loss-of-Cell-Delineation

Description: Indicates whether an HEC check failed on the line.

Usage: The Loss-Of-Cell-Delineation setting is read only. Values are as follows:

- `true`—Indicates that an HEC check failed.
- `false`—Indicates that the line passed an HEC check.

Example: `loss-of-cell-delineation = false`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: Loss-of-Signal

Loss-of-Frame

Description: Indicates whether a framing error has occurred on the line (also known as a *red alarm*).

Usage: The Loss-Of-Frame value is read only. Valid values are as follows:

- `true`—Indicates that a framing error has occurred on the line.
- `false`—Indicates that the line is up and in frame.

Example: `loss-of-frame = false`

Location: DS3-ATM {shelf-*N* slot-*N N*}, OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: Loss-of-Signal

Loss-of-Signal

Description: Indicates whether the carrier is maintaining a connection or not.

Usage: The Loss-Of-Signal value is read only. Valid values are as follows:

- `true`—Indicates that the carrier is not maintaining a connection.
- `false`—Indicates that the carrier is maintaining a connection.

Example: `loss-of-signal = false`

Location: DS3-ATM {shelf-*N* slot-*N N*}, OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: Loss-of-Frame

Loss-of-Sync

Description: Indicates a loss of synchronization on the DS1 ATM line.

Usage: Valid values for this read-only parameter are as follows:

- `true`—Indicates a loss of synchronization.
- `false`—Indicates no loss is indicated.

Example: `loss-of-sync = False`

Location: DS1-ATM-Stat { shelf-*N* slot-*N N*}

See Also: Carrier-Established, Cell-Delineation, IMA-Link-Statistic, IMA-Link-Status, Line-State

LOSW-Second

Description: Indicates the number of 1-second intervals during which one or more HDSL2 loss-of-synchronous-word (LOSW) defects are declared.

Usage: Read only display.

Example: losw-second = 1

Location: HDSL2-Stat { shelf-*N* slot-*N N* } > Physical-Statistic

See Also: Errored-Second, Loop-Attenuation, Severely-Errored-Second, Unavailable-Second

Low-Priority-Weight

Description: Sets the weight of this queue on the low-priority scheduler. The relative weight determines how much of the scheduler's work cycle this queue can receive relative to other queues on the same scheduler.

Usage: Range is 0 to 15. The total weight per scheduler must be less than or equal to 128. The high-priority weight or low-priority weight must be nonzero if the queue is active.

Example: set low-priority-weight = 0

Location: Controller-Static-Config > Atm-Parameters > Outgoing-Queue

See Also: High-Priority-Weight, UBR

LQM

Description: *Not currently used.* Specifies whether the Stinger unit requests link-quality monitoring when answering a Point-to-Point Protocol (PPP) call. Link-quality monitoring counts the number of packets sent across the link and periodically asks the remote end how many packets it has received. Discrepancies are evidence of packet loss and indicate link-quality problems. Link-quality monitoring also generates periodic link-quality reports, and the two ends of the link exchange the reports.

Location: Connection > PPP-Options

LQM-Maximum-Period

Description: *Not currently used.* Specifies the maximum period, in one-hundredths of a second, during which the Stinger unit will accept and send link-quality monitoring packets when answering a Point-to-Point Protocol (PPP) call.

Usage: When this parameter becomes available, you will be able to specify a number from 0 to 600. The default is 600.

Example: lqm-maximum-period = 600

Location: Connection > PPP-Options

LQM-Minimum-Period

Description: *Not currently used.* Specifies the minimum period, in one-hundredths of a second, during which the Stinger unit will accept and send link-quality monitoring packets when answering a Point-to-Point Protocol (PPP) call.

Usage: When this parameter becomes available, you will be able to specify a number from 0 to 600. The default is 600.

Example: `lqm-minimum-period = 600`

Location: Connection > PPP-Options

M

MAC-Address

Description: Specifies the media access control (MAC) address of an Ethernet interface. An Ethernet MAC address is a 12-digit hexadecimal number denoting the physical address encoded in the controller.

Usage: In most cases, the MAC-Address value is obtained from the system. However, you can clone a profile by reading an existing one and changing its physical address.

Example: `set mac-address = 00:c0:6c:4e:ac:5a`

Location: Ether-Info {shelf-*N* slot-*N N*}

See Also: Down-Preference, Link-State

Magic-Key

Description: Indicates the magic key for the virtual channel connection (VCC).

Usage: The Magic-Key value is read only.

Location: ATMVCC-Stat *circuit-name*

See Also: Magic-Keys

Magic-Keys

Description: An array that contains read-only values for the Asynchronous Transfer Mode (ATM) magic keys.

Usage: With an ATMPVC-Stat profile as the working profile, enter **`list magic-keys`** to display the Magic-Keys values. For example:

```
admin> list magic-keys
[in ATMPVC-STAT/unit1:magic-keys]
magic-keys[1] = 16777313
magic-keys[2] = 16777313
```

To return to a higher context in the profile:

```
admin> list ..
```

Location: ATMPVC-Stat *circuit-name*

See Also: Magic-Key

Major-Firmware-Ver

Description: Indicates the major firmware version of the SDSL line interface module (LIM).

Usage: The Major-Firmware-Ver value is read only.

Location: SDSL-Stat {shelf-*N* slot-*N N*} > Physical-Status

See Also: Diff-Delay-Max, Down-Stream-Rate-Fast, Hardware-Ver, If-Group-Index, Minor-Firmware-Ver, Unit-Type

Management-Only-Interface

Description: Enables or disables management-only on the IP interface. The management-only interface is the shelf-controller port.

Usage: Valid values are as follows:

- `Yes`—Specifies that incoming traffic on the interface terminates in the system itself, and is not forwarded on any other interface. In addition, only traffic generated by the system is forwarded on the management-only interface. Traffic generated externally is dropped on the interface.

- `No`—Specifies that the management-only feature is disabled. This is the default.

Example: `set management-only-interface = yes`

Location: IP-Interface {shelf-*N* slot-*N N*}

See Also: Directed-Broadcast-Allowed, Down-Preference, IP-Address, Proxy-Mode, RIP-Mode

Manually-Spared-Slot-Number

Description: Specifies the primary line interface module (LIM) associated with the spare specified by Spare-Slot-Number (spared-LIM).

Permission level: Specify an integer. The default is `any-slot`.

Example: `set manually-spared-slot-number = 2`

Dependencies: Manually-Spared-Slot-Number does not apply if Sparing-Mode = Inactive.

Location: LIM-Sparing-Config

See Also: Spare-Slot-Number, Sparing-Mode

Margin-Config

Description: A subprofile that configures noise-margin values.

Usage: With AL-DMT as the working profile, list the Margin-Config subprofile. For example:

```
admin> read al-dmt {1 4 1}
AL-DMT/{ shelf-N slot-N N } read

admin> list margin-config
[in AL-DMT/{ shelf-1 slot-4 1 }:margin-config]
target-noise-margin-up=6
target-noise-margin-down=6
min-noise-margin-up=0
```

```
min-noise-margin-down=0
max-add-noise-margin-up=31
max-add-noise-margin-down=31
ra-downshift-margin-up=0
ra-downshift-int-up=0
ra-downshift-margin-down=0
ra-downshift-int-down=0
ra-upshift-margin-up=0
ra-upshift-int-up=0
ra-upshift-margin-down=0
ra-upshift-int-down=0
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: AL-DMT

See Also: Max-Add-Noise-Margin-Down, Max-Add-Noise-Margin-Up, Min-Noise-Margin-Down, Min-Noise-Margin-Up, RARP-Enabled, RA-Upshift-Int-Down, RA-Downshift-Margin-Down, RA-Downshift-Margin-Up, RA-Upshift-Int-Up, RA-Upshift-Int-Down, RA-Upshift-Margin-Down, RA-Upshift-Margin-Up

Max-Active-VCI-Bits

Description: Indicates the maximum number of active virtual channel identifier (VCI) bits configured for use at this Asynchronous Transfer Mode (ATM) interface.

Usage: This parameter is read only. For details about vrtual path identifier/virtual channel identifier (VPI/VCI) allocation in the Stinger unit, see the *Stinger ATM Configuration Guide*.

Example: `max-active-vci-bits = 13`

Location: ATM-If-Config { { any-shelf any-slot *N* } *N* } > Base-Config

See Also: Max-Switched-VPC-VPI

Max-Active-VPI-Bits

Description: Indicates the maximum number of virtual path identifier (VPI) bits in vrtual path identifier/virtual channel identifier (VPI/VCI) pairs on the asynchronous transfer mode ATM interface.

Usage: This parameter is read only. For details about VPI-VCI allocation in the Stinger unit, see the *Stinger ATM Configuration Guide*.

Example: `max-active-vpi-bits = 8`

Location: ATM-If-Config { { any-shelf any-slot *N* } *N* } > Base-Config

See Also: Max-Switched-VPC-VPI

Max-Add-Noise-Margin-Down

Description: Specifies the maximum downstream noise margin beyond the Target-Noise-Margin-Down value that the line tolerates relative to 0dB before attempting to reduce power output.

Usage: Specify an integer from 0- to 31dB. The modem software limits the maximum noise margin to 15dB. If you specify a setting greater than 15, the modem software uses 15dB.

The default is 31dB for 12-port LIMs and 30dB for a 48-port line interface module (LIM).

This parameter is not used and has no effect for 24-port LIMS.

Example: `set max-add-noise-margin-down = 15`

Location: AL-DMT {shelf-*N* slot-*N N*} > Margin-Config

See Also: Max-Add-Noise-Margin-Up

Max-Add-Noise-Margin-Up

Description: Specifies the maximum upstream noise margin beyond the Target-Noise-Margin-Up value that the line tolerates relative to 0dB before attempting to reduce power output.

Usage: Specify an integer from 0 to 31dB. The default is 31 and 30dB for a 48-port line interface module (LIM). The modem software limits the maximum noise margin to 15dB. If you specify a setting greater than 15, the modem software uses 15dB.

The default is 31dB for 12-port LIMs and 30dB for 48-port LIMs.

This parameter is not used and has no effect for 24-port LIMS.

Example: `set max-add-noise-margin-up = 15`

Location: AL-DMT {shelf-*N* slot-*N N*} > Margin-Config

See Also: Max-Add-Noise-Margin-Down

Max-Aggr-Power-Level-Down

Description: Specifies the maximum aggregate power level on the downstream channel on the designated line in this Line-Config profile.

Usage: Specify an integer from 0 to 20dBm.The default is 20

Example: `set max-aggr-power-level-down = 13`

Location: AL-DMT {shelf-*N* slot-*N N*} > Line-Config

See Also: Max-Aggr-Power-Level-Up

Max-Aggr-Power-Level-Up

Description: Specifies the maximum aggregate power level on the upstream channel on the designated line in this Line-Config profile..

Usage: Specify an integer from 0 to 13dBm. The default is 13.

Example: `set max-aggr-power-level-up = 10`

Location: AL-DMT {shelf-*N* slot-*N N*} > Line-Config

See Also: Max-Aggr-Power-Level-Down

Max-Baud-Rate

Description: Specifies the highest baud rate that digital modems should attempt to negotiate. Typically, the digital modems start with the highest possible baud rate (33600) and negotiate down to the rate accepted by the remote modem. You can adjust the maximum rate to bypass some of the negotiation cycles, provided that no incoming calls use a baud rate higher than the value you specify for Max-Baud-Rate.

Usage: Specify one of the following values:

```
33600-Max-Baud  (the default)
31200-Max-Baud
28800-Max-Baud
26400-Max-Baud
2400-Max-Baud
21600-Max-Baud
19200-Max-Baud
16800-Max-Baud
14400-Max-Baud
12000-Max-Baud
9600-Max-Baud
7200-Max-Baud
4800-Max-Baud
2400-Max-Baud
```

Example: `set max-baud-rate = 31200-max-baud`

Dependencies: If terminal services are disabled, Max-Baud-Rate does not apply.

Location: Terminal-Server > Modem-Configuration

See Also: Modem-Configuration

Max-Bitrate-Down

Description: Specifies the maximum requested bit rate for downstream traffic.

Usage: Specify an integer from 0kbps to 15000 kbps. The default value is 8000 Kbps for 12- and 24 port LIMs and 2272 Kbps for 48-port LIMs.

Does not apply for operator-controlled rate adaptation.

Example: `set max-bitrate-down = 10000`

Dependencies: Consider the following:

- Max-Bitrate-Down does not apply to operator-controlled rate-adaptation.
- If you set Max-Bitrate-Down to a nonzero value in the one subprofile, set Max-Bitrate-Down to 0 (zero) in the other subprofile.

Location: AL-DMT {shelf-*N* slot-*N N*} > Fast-Path-Config,
AL-DMT {shelf-*N* slot-*N N*} > Interleave-Path-Config

See Also: Max-Bitrate-Up

Max-Bitrate-Up

Description: Specifies the maximum requested bit rate for upstream traffic when operator-controlled rate-adaptive mode is in use.

Usage: Specify an integer from 0Kpbs to 2000 Kbps.The default value is 512Kbps for a 12- or 24-port line interface module (LIM) and 544 Kbps for 48-port LIMs.

Example: `set max-bitrate-up = 1200`

Dependencies: Consider the following:

- Max-Bitrate-Up does not apply to operator-controlled rate-adaptation.
- If you set Max-Bitrate-Up to a nonzero value in one subprofile, set Max-Bitrate-Up to 0 (zero) in the other subprofile.

Location: AL-DMT {shelf-*N* slot-*N N*} > Fast-Path-Config,
AL-DMT {shelf-*N* slot-*N N*} > Interleave-Path-Config

See Also: Max-Bitrate-Down

Max-Burst-Size

Description: Specifies the maximum number of Asynchronous Transfer Mode (ATM) cells that can be transmitted at peak cell rate (PCR) before the Stinger unit unit determines that the connection exceeds the traffic contract. Once the maximum burst size (MBS) value is reached, the Stinger Unit begins discarding or tagging cells.

Usage: This value is expressed relative to the PCR (as a cell rate, not Kbps). It applies only to variable bit rate (VBR) real-time traffic. The default value is 4. The range is 0 to 50.

Example: `set Max-Burst-Size = 10`

Location: ATM-QOS

See Also: Peak-Rate-Kbits-Per-Sec, Tag-or-Discard

Max-Call-Duration

Description: Specifies the maximum number of minutes an incoming call can remain connected. For a multichannel call, the maximum applies to each channel.

Usage: Specify a number from 0 to 1440. The Stinger unit checks the connection once per minute, so the actual time the call is connected is slightly longer than the time you set. The default is 0 (zero), which specifies that the Stinger unit does not set a limit on the duration of an incoming call.

Location: Answer-Defaults > Session-Info, Connection *station* > Session-Options

See Also: Session-Options

Max-Cc

Description: Specifies the maximum number of control protocol data unit (PDU) retransmissions of the types BGN, END, and RESYNC are allowed.

Usage: Valid values are from zero to 64. The default value is four retransmissions allowed.

Example: set max-cc = 4

Location: ATM-IF-SIG-PARAMS *N* > Qsaal-Options

See Also: Max-Stat, Max-Pd, Tcc-Ms, Tkeepalive-Ms, Tpoll-Ms

Max-Delay-Down

Description: Specifies the maximum allowed downstream delay (in microseconds) that is induced by interleaving data.

Usage: Specify a value from 0 to 64 in microseconds. The default is 16.

Example: set max-delay-down = 10

Location: AL-DMT {shelf-*N* slot-*N N*} > Interleave-Path-Config

See Also: Max-Delay-Up

Max-Delay-Up

Description: Specifies the maximum allowed upstream delay (in microseconds) that is induced by interleaving data.

Usage: Specify a value from 0 to 64 in microseconds. The default is 16.

Example: set max-delay-up = 10

Location: AL-DMT {shelf-*N* slot-*N N*} > Interleave-Path-Config

See Also: Max-Delay-Down

Max-Dialout-Time

Description: Specifies the maximum number of seconds the system waits for a Call Setup Complete from the remote side when dialing out.

Usage: Specify an integer from 0 to 255. The default is 20 seconds. If Max-Dialout-Time is set to 0 (zero), the Stinger unit uses its internal default of 20 seconds.

Example: In the following example, the dial-out timer is set to 60 seconds:

```
admin> read system
SYSTEM read
admin> set max-dialout-time = 60
admin> write
SYSTEM written.Profile and Parameter Reference
Maximum-Channels
```

Dependencies: Consider the following:

- The Max-Dialout-Time setting does not influence the modem timeout to detect carrier. Modems have an internal timer that counts down from dial-out to establishing carrier with the remote modem (including training), which for Rockwell modems has a default of 45 seconds.

- For Voice over IP (VoIP) processing, a setting of 60 or greater is recommended to allow sufficient time for the unit to establish the connection with the called destination. In addition, a setting of 60 makes this timer consistent with other internal H.323 timers, which are hardcoded to time out after 60 seconds. The unit can clear abandoned or failed outgoing calls more quickly and efficiently.

Location: System

See Also: Beta-IMA-Value, Delta-Cell-Delin-Value, Gamma-IMA-Value, Call-Routing-Sort-Method, Idle-Logout, Name, Parallel-Dialing, Perm-Conn-Upd-Mode, Ses-Rate-Mode, Single-File-Incoming, System-Rmt-Mgmt, Userstat-Format, Use-Trunk-Groups

Maximum-Channels

Description: Specifies the default value for the maximum number of channels in a multichannel call.

Usage: Specify a number from 1 to 32.

Example: set maximum-channels = 10

Location: Connection > Mp-options

See Also: Minimum-Channels

MaxLink-Client-Enabled

Description: Indicates whether the MAXLink client software is enabled.

Usage: Valid values for this read-only parameter are as follows:

- enabled— indicates that the MAXLink client software is enabled for the Stinger unit.
- disabled—indicates that the MAXLink client software is not enabled.

Example: maxlink-client-enabled = enabled

Location: Base

Max-Pd

Description: Specifies the maximum number of sequenced data protocol data units (PDUs) allowed between poll intervals.

Usage: Valid values are from 1 to 64. The default value is 25.

Example: set max-pd = 28

Location: ATM-if-Sig-Params *N* > Qsaal-Options

See Also: Max-Cc, Max-Stat, Tcc-Ms,Tkeepalive-Ms, Tpoll-Ms

Max-Power-Spectral-Density

Description: Specifies the maximum power spectral density (PSD) in both directions.

Usage: Specify a number from 34 to 52 in even-numbered increments. The default is 40. If you specify an odd number, the system uses the even-numbered setting below it. The actual value used is the negative value of the number you specify.

Example: set max-power-spectral-density = 34

Location: AL-DMT {shelf-*N* slot-*N N*} > Line-Config

See Also: Max-Aggr-Power-Level-Down, Max-Aggr-Power-Level-Up

Max-Rate

Description: Specifies the maximum data rate a SDSL module supports, in kilobits per second.

Usage: The loop can be set to support up to 2.32 Mbps. Specify one of the following values in kilobits per seconds (kbps):

    144000
    160000
    192000
    208000
    272000
    384000
    400000

416000
528000
768000
784000 (the default)
1040000
1152000
1168000
1536000
1552000
1568000
2320000

Example: `set max-rate = 1536000`

Location: SDSL {shelf-*N* slot-*N N*} > Line-Config

See Also: Data-Rate-Mode

Max-Restart

Description: Specifies the maximum number of unacknowledged transmit RESTART messages allowed.

Usage: Specify a number from zero (0) to 32. The default is 2.

Example: `set max-restart = 4`

Location: ATM-If-Sig-Params *N* > Q2931-Options

Max-Source-Port

Description: Specifies the highest Rlogin source port value.

Usage: Specify an integer from 128 to 1023. The default is 1023. The value you specify should be greater than or equal to the setting of Min-Source-Port.

Example: `set max-source-port = 250`

Dependencies: Rlogin must be enabled for Max-Source-Port to have any effect.

Location: Terminal-Server > Terminal-Mode-Configuration > Rlogin-Options

See Also: Min-Source-Port

Max-Stat

Description: Specifies the maximum length of the STAT protocol data unit (PDU).

Usage: Valid values are from 32 to 128. The default value is 67.

Example: `set max-stat = 64`

Location: ATM-If-Sig-Params *N* > Qsaal-Options

See Also: Max-Statenq

Max-Statenq

Description: Specifies the maximum number of unacknowledged transmit STATUS ENQ messages allowed.

Usage: The default value is 1. Up to 32 are allowed.

Example: `set max-statenq = 2`

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Max-Stat

Max-Switched-VCC-VPI

Description: Indicates the maximum virtual path identifier (VPI) supported by the signaling stack on the interface for allocation to switched virtual channel (VCC) connections.

Usage: This parameter is read only. For details about VPI-VCI allocation in the Stinger unit, see the *Stinger ATM Configuration Guide*.

Example: `max-switched-vcc-vpi = 255`

Location: ATM-If-Config { { any-shelf any-slot *N* } *N* } > Extension-Config

See Also: Max-Switched-VPC-VPI, Max-VCCs

Max-Switched-VPC-VPI

Description: Indicates the maximum virtual path identifier (VPI) supported by the signaling stack on the interface for allocation to switched virtual path connections(VPCs).

Usage: This parameter is read only. For details about VPI-VCI allocation in the Stinger unit, see the *Stinger ATM Configuration Guide*.

Example: `max-switched-vpc-vpi = 255`

Location: ATM-If-Config { { any-shelf any-slot *N* } *N* } > Extension-Config

See Also: Max-VCCs, Active-Upstream-Bandwidth-On-Trunks, Standby-Upstream-Bandwidth-On-Trunks

Max-Upstream-Bandwidth

Description: Indicates the maximum upstream bandwidth of all line interface modules (LIMs).

Usage: The Max-Upstream-Bandwidth value is read only.

Example: `max-upstream-bandwidth = 622160`

Location: Bandwidth-Stats

See Also: Active-Upstream-Bandwidth-On-Trunks,
Standby-Upstream-Bandwidth-On-Trunks

Max-VCCs

Description: Indicates the maximum number of virtual channel connections (VCCs)
supported on the interface.

Usage: This parameter is read only. For details about VPI-VCI allocation in the Stinger unit,
see the *Stinger ATM Configuration Guide*.

Example: `max-vccs = 8192`

Location: ATM-If-Config { { any-shelf any-slot *N* } *N* } > Base-Config

See Also: Max-Switched-VPC-VPI, Active-Upstream-Bandwidth-On-Trunks,
Standby-Upstream-Bandwidth-On-Trunks

Max-VPCs

Description: Indicates the maximum number of virtual path connections (VPCs) supported
on the interface.

Usage: This parameter is read only. For details about VPI-VCI allocation in the Stinger unit,
see the *Stinger ATM Configuration Guide*.

Example: `max-vpcs = 255`

Location: ATM-If-Config { { any-shelf any-slot *N* } *N* } > Base-Config

See Also: Max-VCCs, Max-Switched-VPC-VPI

Media-Speed-Mbit

Description: Specifies the speed of the Ethernet port.

Usage: Valid values are as follows:
- `10mb`—Specifies 10Mbps.
- `100mb`—Specifies 100Mbps. This is the default.

Example: `set media-speed-mbit = 10mb`

Location: Ethernet {shelf-*N* slot-*N N*}

Menu-Mode-Options

Description: A subprofile that configures terminal-server configuration options for menu
mode.

Usage: With Terminal-Server as the working profile, list the Menu-Mode-Options subprofile.

Example:

```
admin> list menu-mode-options
[in TERMINAL-SERVER:menu-mode-options]
start-with-menus=no
toggle-screen=no
remote-configuration=no
text-1=""
host-1=0.0.0.0
text-2=""
host-2=0.0.0.0
text-3=""
host-3=0.0.0.0
text-4=""
host-4=0.0.0.0
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: Terminal-Server

See Also: Host-N, Remote-Configuration, Start-With-Menus, Text-N (N=1–4), Toggle-Screen

Menu-Selection-String

Description: Specifies the selection string for the menu mode.

Usage: Enter up to 60 characters.

Example: set menu-selection-string = Select from these options

Location: Terminal-Server > Menu-Mode

See Also: Menu-Mode-Options

Metric

Description: Specifies a metric for the route in the style of Routing Information Protocol (RIP).

Usage: Specify an integer from 1 to 15. The default is 1. The higher the metric, the less likely that the Stinger unit uses the route.

Example: set metric = 8

Location: IP-Route *name*

See Also: RIP, RIP-Mode, Routing-Metric

Metrics1

Description: *Not currently used.* Specifies the maximum cell rate in cells per second for the service categories represented in the Metrics-Classes value.

Usage: The default value is 4294967295 (0xFFFFFFFF).

Example: `metrics1 = 4294967295`

Location: PNNI-Metrics { *N N* incoming *N* }

See Also: Metrics2, Metrics-Admin-Weight, Metrics-Classes, Metrics-Gcac-Clp, Node-Index

Metrics2

Description: *Not currently used.* Specifies the available cell rate in cells per second for the service categories represented in the Metrics-Classes value.

Usage: The default value is 4294967295 (0xFFFFFFFF).

Example: `metrics2 = 4294967295`

Location: PNNI-Metrics { *N N* incoming *N* }

See Also: Metrics1, Metrics-Admin-Weight, Metrics-Classes, Metrics-Gcac-Clp, Node-Index

Metrics3

Description: *Not currently used.* Specifies the cumulative maximum cell transfer delay in microseconds for the service categories represented in the Metrics-Classes value.

Usage: The default value is 4294967295 (0xFFFFFFFF).

Example: `metrics3 = 4294967295`

Location: PNNI-Metrics { *N N* incoming *N* }

See Also: Metrics1, Metrics-Admin-Weight, Metrics-Classes, Metrics-Gcac-Clp, Node-Index

Metrics4

Description: *Not currently used.* Specifies the cumulative cell delay variation in microseconds for the service categories represented in the Metrics-Classes value.

Usage: The default value is 4294967295 (0xFFFFFFFF).

Example: `metrics4 = 4294967295`

Location: PNNI-Metrics { *N N* incoming *N* }

See Also: Metrics1, Metrics-Admin-Weight, Metrics-Classes, Metrics-Gcac-Clp, Node-Index

Metrics5

Description: *Not currently used.* Specifies the cumulative cell loss ratio for cell loss priority (CLP) = 0 traffic for the specified service categories.

Usage: The Stinger computes the cell-loss ratio value as 10**(-n) where *n* is the value returned in this variable. The default value is 4294967295 (0xFFFFFFFF).

Example: `metrics5 = 4294967295`

Location: PNNI-Metrics { *N N* incoming *N* }

See Also: Metrics1, Metrics-Admin-Weight, Metrics-Classes, Metrics-Gcac-Clp, Node-Index

Metrics6

Description: *Not currently used.* Specifies the cumulative cell loss ratio for cell loss priority (CLP) = 0+1 traffic for the specified service categories.

Usage: The Stinger computes the cell loss ratio value as 10**(-n) where *n* is the value returned in this variable. The default value is 4294967295 (0xFFFFFFFF).

Example: `metrics6 = 4294967295`

Location: PNNI-Metrics { *N N* incoming *N* }

See Also: Metrics1, Metrics-Admin-Weight, Metrics-Classes, Metrics-Gcac-Clp, Node-Index

Metrics7

Description: *Not currently used.* Specifies the cell rate margin in cells per second for the service categories represented in the Metrics-Classes value.

Usage: The default value is 4294967295 (0xFFFFFFFF).

Example: `metrics7 = 4294967295`

Location: PNNI-Metrics { *N N* incoming *N* }

See Also: Metrics1, Metrics-Admin-Weight, Metrics-Classes, Metrics-Gcac-Clp, Node-Index

Metrics8

Description: *Not currently used.* Specifies the variance factor in units of 2**(-8) for the service categories represented in the Metrics-Classes value.

Usage: The default value is 4294967295 (0xFFFFFFFF).

Example: `metrics8 = 4294967295`

Location: PNNI-Metrics { *N N* incoming *N* }

See Also: Metrics1, Metrics-Admin-Weight, Metrics-Classes, Metrics-Gcac-Clp, Node-Index

Metrics-Admin-Weight

Description: Specifies the relative weight of the assigned service categories from the advertising node to the remote endIn Private Network-to-Network Interface (PNNI).

Usage: Specify a number assigning the relative weight.

Example: `set metrics-admin-weight = 5040`

Location: PNNI-Metrics { *N N* incoming *N* }

See Also: Metrics1, Metrics-Classes, Metrics-Gcac-Clp, Node-Index

Metrics-Classes

Description: Specifies the number that translates to a 5-bit binary bitmask that specifies the service categories to which this set of metrics applies. Each bit that is set represents a single service category for which the resources indicated are available. Bit 5 represents CBR, bit 4 represents real-time VBR, bit 3 represents non-real-time VBR, bit 2 represents ABR, and bit 1 represents UBR. A one (1) in the bitmask indicates that the metrics do apply, and a zero (0) that the metrics do not apply to the associated service categories.

Example: `set metrics-classes = 0`

Location: PNNI-Metrics { *N N* incoming *N* }

See Also: Metrics1, Metrics-Admin-Weight, Metrics-Gcac-Clp, Node-Index

Metrics-Direction

Description: Specifies the direction in which the parameters in this profile apply, relative to the advertising node.

Usage: Valid values are `incoming` (the default) and `outgoing`.

Example: `set metrics-direction = outgoing`

Location: PNNI-Metrics { *N N* incoming *N* } > Metrics-Index

See Also: Metrics-Index, Metrics-Tag

Metrics-Gcac-Clp

Description: Specifies the cell loss priority (CLP) level at which the advertised generic connection admission control (GCAC) parameters apply.

Usage: Valid values are as follows:

- `clpequal0or1`—Specifies that GCAC parameters apply to cells with a cell loss priority of one (low priority cells). Thus cells with a low priority may be discarded during periods of congestion. This is the default.

- `clpequal0`—Specifies that GCAC parameters apply to cells with a cell loss priority of zero (normal cells). Thus normal priority cells may be discarded during periods of congestion.

Example: `set metrics-gcac-clp = clpequal0`

Location: PNNI-Metrics { *N N* incoming *N* }

See Also: Metrics1, Metrics-Admin-Weight, Metrics-Classes, Node-Index

Metrics-Index

Description: Specifies an identifer for the Metrics-Tag and Metrics-Direction parameters of the same subprofile.

Usage: Specify a number as the index.

Example: `set metrics-index = 29`

Location: PNNI-Metrics { *N N* incoming *N* } > Metrics-Index

See Also: Metrics1, Metrics-Admin-Weight, Metrics-Classes, Metrics-Gcac-Clp, Node-Index

Metrics-Tag

Description: Specifies an integer used to associate a set of traffic parameters that are always advertised together.

Usage: This is a tag representing a group of metric settings that apply for the connectivity from the advertising node to the reachable address prefix. The tag must be defined in one or more PNNI-Metrics profiles. If no traffic parameters apply, use the value zero.

Example: `set metrics-tag = 12`

Location: PNNI-Metrics { *N N* incoming *N* } > Metrics-Index, PNNI-Route-Addr

See Also: If-Index, Metrics-Direction, Metrics-Index

MFR-Bundle-Name

Description: Specifies the name of the multilink Frame Relay (MFR) bundle to which this data link belongs.

Usage: Specify a string of up to 15 characters. This name is used differently according to the profile in which it occurs:

- In a Multi-Link-FR profile, MFR-Bundle-Name defines a name for the bundle and for the Multi-Link-FR profile.

- In a Frame-Relay profile—MFR-Bundle-Name adds the datalink and all Data Link Connection Identifiers (DLCIs) that use it to the MFR bundle. All member data links must specify the same bundle name in the Frame-Relay profile.

- In a Connection profile—MFR-Bundle-Name adds the DLCI

Example: `set mfr-bundle-name = mfrb1`

Location: Connection *station* > Fr-Options, Frame-Relay,

See Also: Circuit-Name, FR-Link-Type, FR-Direct-Enabled, FR-Direct-Profile, FR-Direct-DLCI, MFR-Bundle-Name

Min-Bitrate-Down

Description: Specifies the minimum bit rate for downstream traffic.

Usage: Specify an integer from 0 to 8192Kbps. The default value is 128Kbps for 12- and 24-port LIMs and 32Kbps for 48-port LIMs.

Example: `set min-bitrate-down = 100`

Dependencies: Consider the following:

- When automatic rate-adaptive mode is in effect, the line initializes at the downstream rate of Min-Bitrate-Down, or it does not initialize at all.

- Min-Bitrate-Down does not apply to operator-controlled rate-adaptation.

- If you set Min-Bitrate-Down to a nonzero value in one subprofile, Min-Bitrate-Down must be set to 0 (zero) in the other subprofile.

Location: AL-DMT {shelf-*N* slot-*N N*} > Fast-Path-Config,
AL-DMT {shelf-*N* slot-*N N*} > Interleave-Path-Config

See Also: Min-Bitrate-Up

Min-Bitrate-Up

Description: Specifies the minimum bit rate for upstream traffic.

Usage: Specify an integer from 0 to 1024Kbps. The default value is 128Kbps for a 12- and a 24-port line interface module (LIM) and 32Kbps for 48-port LIMs.

Example: `set min-bitrate-up = 20`

Dependencies: Consider the following:

- When automatic rate-adaptive mode is in effect, the line initializes at the upstream rate of Min-Bitrate-Up, or it does not initialize at all.

- Min-Bitrate-Up does not apply to operator-controlled rate-adaptation.

- If you set Min-Bitrate-Up to a nonzero value in one subprofile, set Min-Bitrate-Up to 0 (zero) in the other subprofile.

Location: AL-DMT {shelf-*N* slot-*N N*} > Fast-Path-Config,
AL-DMT {shelf-*N* slot-*N N*} > Interleave-Path-Config

See Also: Min-Bitrate-Down

Minimum-Channels

Description: Specifies the minimum number of channels in a multichannel call.

Usage: Specify an integer from 1 to 32. The default is 1.

Example: `set minimum-channels = 2`

Location: Answer-Defaults > MP-Answer, Connection station > MP-Options

See Also: Base-Channel-Count, Maximum-Channels, MP-Options

Min-Noise-Margin-Down

Description: Specifies the minimum downstream noise margin that the line tolerates relative to 0dB before attempting to increase power output.

Usage: Specify an integer from 1dB to 31dB. The default is 6dB for 12-port line interface modules (LIMs) and 0dB for 48-port LIMs. The modem software limits the maximum noise margin to 15dB. If you specify a setting greater than 15, the modem software uses 15dB.

This parameter is not used and has no effect for 24-port LIMS.

Example: `min-noise-margin-down = 15`

Location: AL-DMT {shelf-*N* slot-*N N*} > Margin-Config

See Also: Min-Noise-Margin-Up

Min-Noise-Margin-Up

Description: Specifies the minimum upstream noise margin that the line will tolerate relative to 0dB before attempting to increase power output.

Usage: Specify an integer from 1 to 31dB. The default is 6dB for 12-port LIMs and 0dB for 48-port LIMs. The modem software limits the maximum noise margin to 15dB. If you specify a setting greater than 15, the modem software uses 15dB.

This parameter is not used and has no effect for 24-port LIMS.

Example: `set min-noise-margin-up = 15`

Location: AL-DMT {shelf-*N* slot-*N N*} > Margin-Config

See Also: Min-Noise-Margin-Down

Minor-Firmware-Ver

Description: Indicates the minor firmware version of the synchronous digital subscriber line (SDSL) line interface module (LIM).

Usage: The Minor-Firmware-Ver setting is read only.

Example: `Minor-Firmware-ver = 0`

Location: SDSL-Stat {shelf-*N* slot-*N N*} > Physical-Status

See Also: Hardware-Ver, If-Group-Index, Major-Firmware-Ver, Unit-Type

Min-Source-Port

Description: Specifies the lowest Rlogin source port value.

Usage: Specify an integer from 128 to 1023. The default is 1023. The value you specify should be less than or equal to the setting of Max-Source-Port.

Example: `set min-source-port = 250`

Dependencies: Rlogin must be enabledin the same subprofile for Min-Source-Port to `have` any effect.

Location: Terminal-Server > Terminal-Mode-Configuration > Rlogin-Options

See Also: Max-Source-Port

Min-Switched-VCC-VCI

Description: Indicates the minimum virtual channel identifier (VCI) supported by the signaling stack on the interface for allocation to switched virtual channel connections (VCCs).

Usage: This parameter is read only. For details about VPI-VCI allocation in the Stinger unit, see the *Stinger ATM Configuration Guide.*

Example: min-switched-vcc-vci = 32

Location: ATM-If-Config { { any-shelf any-slot *N* } *N* } > Extension-Config

See Also: Max-Switched-VCC-VPI

Modem-Configuration

Description: A subprofile configuring the unit's digital modems.

Usage: With Terminal-Server as the working profile, list the Modem-Configuration subprofile. You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile, enter the List command, followed by a space and two periods.

Example: To list the contents of the Modem-Configuration subprofile:

```
admin> list modem-configuration
[in TERMINAL-SERVER:modem-configuration]
v42/mnp = will-v42
max-baud-rate = 33600-max-baud
modem-transmit-level = -10-db-mdm-trn-level
cell-mode-first = no
cell-level = -18-db-cell-level
7-even = no
AT-answer-string = ""
To return to a higher context in the working profile:
admin> list ..
```

Location: Termi nal-Server

See Also: 40-DMT-ADSL, ATM1483Type, Cell-Level, Cell-Mode-First, Max-Baud-Rate, Modem-Transmit-Level, V42/MNP

Modem-Failure-Threshold

Description: Specifies the number of modems on this line interface module (LIM) regarded as nonfunctional before this LIM is considered nonfunctional.

Usage: Specify a number between 1 and 12. The default value is 12 modems.

Example: `set modem-failure-threshold = 10`

Location: LIM-Sparing-Config > Auto-Lim-Sparing-Config

See Also: Error-Averaging-Period, Error-Threshold, Up-Down-Threshold

Modem-Hw-State

Description: Indicates the state of the interface after initialization.

Usage: The Modem-Hw-State value is read only. Valid values are

- `init-ok`—indicates that the interface is functioning normally.
- `bad-sdram`—indicates memory problems, probably associated with a self-test failure.
- `bad-cache`—indicates memory problems, probably associated with a self-test failure.
- `bad-cache-sdram`—indicates memory problems, probably associated with a self-test failure.

Example: `modem-hw-state = init-ok`

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Status

See Also: Hardware-Ver

Modem-Mod

Description: Configures the modem modulation for answering calls on a 56-Kbps modem.

Usage: Valid values are as follows:

- `K56-Modulation`—Specifies that the module can operate at a normal rate.
- `V34-Modulation`—Specifies that the module never exceeds V.34 speeds (33.6K) and does not send the V.8bis tone.
- `V90-Modulation`—Specifies that the module operates at V.90 modulation. This is the default.

Example: `set modem-mod = v34-modulation`

Location: Termi nal-Server > Modem Configuration

See Also: 40-DMT-ADSL, ATM1483Type, Cell-Level, Cell-Mode-First, Max-Baud-Rate, Modem-Transmit-Level, V42/MNP

Modem-Table-Index

Description: Indicates the Simple Network Management Protocol (SNMP) modem table index number of the device whose state is described by the Admin-State or Admin-State-Phys-If profile.

Usage: The Modem-Table-Index setting is read only.

Location: Admin-State {shelf-*N* slot-*N N*}, Admin-State-Phys-If {shelf-*N* slot-*N N*}

See Also: Modem-Configuration, Modem-Transmit-Level

Modem-Transmit-Level

Description: Specifies the transmit attenuation level for a digital modem. When a modem calls, the Stinger unit attempts to connect at the transmit level you specify.

Usage: Generally, you do not need to change the transmit level. However, when the carrier is aware of line problems or irregularities, you might need to alter the modem's transmit level by specifying one of the following values:

- `-13-dB-Mdm-Trn-Level`—Set the modem transmit level to-13dB. This is the default.
- `-14-dB-Mdm-Trn-Level` —Set the modem transmit level to -14dB)
- `-15-dB-Mdm-Trn-Level`—Set the modem transmit level to -15dB)
- `-16-dB-Mdm-Trn-Level`—Set the modem transmit level to -16dB)
- `-17-dB-Mdm-Trn-Level`—Set the modem transmit level to -17dB)
- `-18-dB-Mdm-Trn-Level`—Set the modem transmit level to -17dB)

Example: `set modem-transmit-level = -17-db-mdm-trn-level`

Dependencies: If terminal services are disabled, Modem-Transmit-Level does not apply. For 56-Kbps modem, accept the default of -10-dB-Mdm-Trn-Level.

Location: Terminal-Server > Modem-Configuration

See Also: Modem-Configuration, Modem-Table-Index

MP-Options

Description: A subprofile in the Connection profile that configures multichannels.

Usage: Following is an example:

```
admin> list .. mp-options
[in CONNECTION/"":mp-options (new)]
base-channel-count = 1
minimum-channels = 1
maximum-channels = 2
```

MPP-Options

Description: Subprofile for configuring Multichannel Point-to-Point Protocol (MPP).

Usage: Use the New, Read, and list commands to make Connection the active profile and list the subprofile.

```
admin> list mpp-op
[in CONNECTION/"":mpp-options (new)]
aux-send-password = ""
dynamic-algorithm = quadratic
bandwidth-monitor-direction = transmit
increment-channel-count = 1
decrement-channel-count = 1
seconds-history = 15
add-persistence = 5
sub-persistence = 10
target-utilization = 70
```

MRU

Description: *Not currently used.* Maximum number of bytes the unit can receive in a single packet across the link interface.

Usage: Usually the default of 1532 is the correct setting. However, if the far-end device is using a significantly smaller maximum transmission unit (MTU), it might be more efficient to set this parameter to a lower number.

Example: set mru = 1524

Location: Connection *station* > PPP-Options

See Also: Bi-Directional-Auth, LQM, LQM-Maximum-Period, LQM-Minimum-Period, MTU, PPP-Circuit, PPP-Circuit-Name, Recv-Password, Send-Auth-Mode, Send-Password, Split-Code-Dot-User-Enabled, Substitute-Recv-Name, Substitute-Send-Name

Msg-Proc-Model

Description: Specifies the message-processing model to use when generating SNMP messages.

Usage: Specify one of the following values:

- V1 (the default) specifies SNMP version 1.
- V3 specifies SNMP version 3. For SNMPv3 Notifications support, specify V3.

Example: set msg-proc-model = v3

Location: SNMPv3-Target-Param *name*

See Also: Active-Enabled, Host-Port, Notify-Tag-List, Security-Level, Security-Model, Security-Name, Tag, Target-Params-Name

MTU

Description: Specifies the maximum transmit unit (MTU)— the largest frame the Stinger unit will transmit.

Usage: Specify a number from 128 to 1524.

Example: `set mtu = 1524`

Location: Connection > PPP-Options

See Also: Link-Mgmt, MRU

Multicast-Address

Description: Specifies the multicast destination address for multicast stacking control packets. The packets are sent to the specified multicast address and to the UDP port number specified by UDP-Port.

Usage: Specify an IP address in dotted decimal notation. The default setting is 239.192.74.72, which is within the organization local scope defined in RFC 2365 as the address space from which an organization must allocate subranges when defining scopes for private use. The specified address must be a valid multicast (class D) address.

Example: `set multicast-address = 239.192.74.75`

Location: Stacking *name*

See Also: Data-IP-Address, Multicast-Interface-IP-Address

Multicast-Interface-IP-Address

Description: Specifies the IP address of the Ethernet port to be used for stacking IP multicast control traffic.

Usage: Specify an IP address in dotted decimal notation. The default is 0.0.0.0, which specifies that the unit uses the system's shelf-controller Ethernet interface.

Example: `set multicast-interface-ip-address = 10.10.10.1`

Location: Stacking *name*

See Also: Data-IP-Address, Multicast-Interface-IP-Address

Multi-Link-FR (profile)

Description: Configures a Frame Relay connection that has multiple links.

Usage: Use the new and list commands to make this the current profile, as in this example:

```
techpubs> new multi-link-fr
MULTI-LINK-FR/"" read
techpubs> list
[in MULTI-LINK-FR/"" (new)]
mfr-bundle-name* = ""
```

```
active = no
mfr-bundle-type = mfr-dte
max-bundle-members = 1
min-bandwidth = 0
```

Multi-Rate-Enabled

Description: Indicates whether the unit can make dialable wideband service (DWS) calls.

Usage: The value is read only. Valid values are as follows.

- Yes—Indicates that the unit can make DWS calls.

- No—Indicates that the unit cannot make DWS calls.

Example: `multi-rate-enabled = yes`

Location: Base

See Also: R2-Signaling-Enabled, Switched-Enabled

Must-Agree

Description: Specifies whether the controllers must agree on the choice of a primary control module.

Usage: Valid values are as follows:

- False—Specifies that the primary controllers need not agree on the choice of a primary control module. This enables a control module to become primary without the agreement of the other control module.This is the default and it is recommended.

- True—Specifies that the primarry controllers must agree.

Example: `must-agree = False`

Location: Redundancy > Context > Context *N*

See Also: Primary-Preference

N

N391-Val

Description: Specifies the number of T391 polling cycles between full Status Enquiry messages.

Usage: Specify an integer from 1 to 255. The default is 6, which specifies that after six status requests spaced T391-Val seconds apart, the UNI-DTE device requests a full status report.

Example: `set n391-val = 15`

Dependencies: If Link-Type = DCE, N391-Val does not apply.

Location: Frame-Relay *fr-name*

See Also: Link-Type, T397-Ms

N392-Val

Description: Specifies the number of errors, during DTE-N393-monitored events, that cause the user side to declare the network side's procedures inactive.

Usage: Specify an integer from 1 to 10. The value you enter should be less than the N393-Val setting. The default is 3.

Example: `set n392-val = 5`

Dependencies: If Link-Type = DCE, N392-Val does not apply.

Location: Frame-Relay *fr-name*

See Also: Link-Type, N393-Val

N393-Val

Description: Specifies the DTE-monitored event count.

Usage: Specify an integer from 1 to 10. The value you enter should be greater than the N392-Val setting. The default is 4.

Example: `set n393-val = 6`

Dependencies: If Link-Type = DCE, N393-Val does not apply.

Location: Frame-Relay *fr-name*

See Also: Link-Type, T397-Ms

Nailed-Group

Description: Specifies a nailed group number associated with a physical line, channel, or interface.

Usage: Specify an integer from 0 to 1024. The default is 0 (zero).

- In the ATM-Options subprofile, the Nailed-Group value specifies the nailed group number associated with the physical interface used by the first side of the circuit.
- In the ATM-Connect-Options subprofile, the Nailed-Group value specifies the nailed group number associated with the physical interface used by the second side of the circuit.
- In the DS3-ATM profile, the Nailed-group number indicates the HDSL2 physical interface. A Connection or RADIUS profile specifies this number to make use of the interface. Each interface is assigned a unique default number, so you do not need to modify this parameter. If you assign a new value, it must be a number from 1 to 1024 that is unique within the system.
- the OC3-ATM profile, and the Line-Config subprofile of the AL-DMT profile, a Connection or RADIUS profile specifies this number to make use of the interface. Each interface is assigned a unique default number, so you do not need to modify this parameter. If you assign a new value, it must be a number from 1 to 1024 that is unique within the system.

Example: `set nailed-group = 601`

Dependencies: Consider the following:

- Do not associate a group number with more than one active profile.
- Referring to the group number in the Nailed-Groups setting of a Connection profile causes the connection to use the associated physical interface.
- The Nailed-Group value in the ATM-Options subprofile must match the Nailed-Groups value in the Telco-Options subprofile.

Location: AL-DMT {shelf-*N* slot-*N N*} > Line Config, Connection > ATM-Options, Connection > ATM-Connect-Options, DS3-ATM {shelf-*N* slot-*N N*} > Line-Config, OC3-ATM {shelf-*N* trunk-module-*N N*} > Line-Config, SDSL {shelf-*N* slot-*N N*} > Line-Config

See Also: Line-Config, Nailed-Groups

Nailed-Groups

Description: Specifies a nailed-up group belonging to a session.

Usage: Specify a number assigned to a group.

Example: `set nailed-groups = 1`

Location: Connection *station* > Telco-Options

See Also: Nailed-Group, Telco-Options

Nailed-Mode

Description: *Not currently used.* Specifies how the Stinger unit uses the link's nailed-up channels, and whether the link uses nailed-up channels alone or a combination of nailed-up and switched channels.

Usage: When this parameter becomes available, you will be able to specify one of the following values:

- `ft1`—Specifies that the link uses only nailed-up channels. This is the default.
- `ft1-mpp` —Specifies that the link uses a combination of nailed-up and switched channels.
- `ft1-bo`—Specifies that the link uses a combination of nailed-up and switched channels with backup and overflow.

In providing backup bandwidth, the Stinger unit unit drops all the nailed-up channels when the quality of a nailed-up channel falls to Marginal or Poor in an FT1-BO call The unit then attempts to replace dropped nailed-up channels with switched channels. It also monitors dropped nailed-up channels. When the quality of all dropped channels changes to Fair or Good, the unit reinstates them.

In providing overflow protection, the Stinger unit unit supplies supplemental dial-up bandwidth during times of peak demand in order to prevent saturation of a nailed-up line. The circuit remains in place until the traffic subsides, and then it is removed.

Example: `nailed-mode = ft1`

Location: Frame-Relay *fr-name*

See Also: Nailed-Up-Group

Nailed-Up-Group

Description: Specifies the group number assigned to the nailed-up channels of a Frame Relay link.

Usage: Specify a number assigned to a group of nailed-up channels. The maximum value you can enter is 1024.

Example: `set nailed-up-group = 5`

Location: Frame-Relay *fr-name*

See Also: Nailed-Mode

Name

Description: Assigns a name to a profile, interface, user, route, host, module, or the Stinger unit system itself.

Usage: Specify a descriptive name with no embedded spaces. The following restrictions apply:

- For all profiles except the IP-Route, SDSL, AL-DMT, OC3-ATM, IDSL, SDSL, and Trap profiles, you can specify up to 24 characters.

- For the IP-Route and Trap profiles, you can specify up to 31 characters.

- For the AL-DMT, OC3-ATM, IDSL, and SDSL profiles, the name refers to an interface. You can specify up to 16 characters. The default value is the interface address in *shelf slot item* format, for example 1 2 3.

- The default is null in all except AL-DMT, OC3-ATM, IDSL, SDSL, and User profiles. In a User profile, the default is default. In AL-DMT, OC3-ATM, IDSL, and SDSL profiles, the default is the interface address in *shelf slot item* format.

Example: set name = newyork

Dependencies: If the Stinger unit unit uses the specified value for authentication, it is case sensitive.

Location: Alarm *name,* AL-DMT {shelf-*N* slot-*N N*}, IP-Route *name*,
 OC3-ATM {shelf-*N* trunk-module-*N N*}, SDSL {shelf-*N* slot-*N N*}, System, Trap *host-name*, User *name*

See Also: Allow-Auth-Config-Rqsts, DS3-ATM (profile), IP-Route (profile), Physical-Address, SDSL (profile), System (profile)

NAS-Port-Type

Description: *Not currently used.* Specifies the type of service for the session.

Usage: When this parameter becomes available, you will be able to specify one of the following values:

- any—Specifies that the incoming call is routed to an analog, digital, or virtual modem. This is the default.

- digital—Specifies that the incoming call is routed to a digital modem. The digital setting restricts the profile to synchronous links, V.110 connections, and V.120 connections.

- analog—Specifies that the incoming call is routed to an analog modem. The analog setting restricts the profile to asynchronous connections on an analog line.

Example: nas-port-type = any

Location: Connection *station* > telco-options

See Also: Call-By-Call, Delay-Callback, Expect-Callback, Nailed-Groups, Transit-Number

Near-End-CRC

Description: Indicates the number of Cyclic Redundancy Check (CRC) errors detected by COE's ADSL Transceiver Unit (ATU).

Usage: The Near-End-CRC value is read only.

Example: near-end-crc = 0

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Near-End-FEC, Near-End-HEC

Near-End-FEC

Description: Indicates the number of Forward Error Correction (FEC) errors detected by COE's ADSL Transceiver Unit (ATU).

Usage: The Near-End-FEC value is read only.

Example: `near-end-fec = 0`

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Near-End-CRC, Near-End-HEC

Near-End-HEC

Description: Indicates the number of Header Error Checksum (HEC) errors detected by COE's ADSL Transceiver Unit (ATU).

Usage: The Near-End-HEC value is read only.

Example: `near-end-hec = 0`

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Near-End-CRC, Near-End-FEC

Near-End-IMA-Group-State

Description: Indicates the current operational state of the near-end inverse multiplexing ATM (IMA) Group State Machine.

Usage: Values are

Value	Description
not-configured	IMA group is not configured.
start-up	IMA group is in the startup state.
start-up-ack	IMA group is in a transitional state and has transitioned out of IMA startup state.
aborted-unsupported-framelength	IMA group establishment is aborted because the frame length (M) received from the remote end was not acceptable to the local end.
aborted-incompatible-symmetry	IMA group establishment is aborted because the remote end and local end have incompatible group symmetry modes.
aborted-other	IMA group establishment is aborted for unspecified reasons.
insufficient-links	IMA group is currently in the insufficient links state.

Value	Description
blocked	IMA group is in the blocked state.
operational	IMA group is in the operational state.
aborted-unsupported-version	IMA group is aborted because of an IMA version mismatch between the local and remote ends.

Example: `near-end-ima-group-state  =  operational`

Location: IMA-Group-Stat > IMA-Rt

See Also: Diff-Delay-Max, Failure-Status, Far-End-IMA-Group-State, Far-End-Txclock-Mode, Last-Change-Time, Least-Delay-Link, Near-End-IMA-Group-State, Running-Secs

Near-End-Num-Failures

Description: Indicates the number of times a near-end group failure (for example, Config-Aborted or Insufficient-Links) has been reported in the current 15-minute interval.

Usage: Valid range for this read only value is from zero to 2147483647.

Example: `near-end-num-failures = 3`

Location: IMA-Group-Stat > IMA-Rt > IMA-Group-Statistic

See Also: Far-End-Num-Failures, Unavailable-Secs

Near-End-Rx-Failure-Status

Description: Indicates the near-end Rx failure status of the link.

Usage: Valid values for this read-only parameter are as follows

Value	Description
no-failure	Link does not have any failure.
ima-link-failure	Link experienced a failure at the IMA layer.
lif-failure	Link experienced a Loss of IMA frame (LIF) failure.
lods-failure	Link experienced a Loss of Delay Synchronization (LODS) failure.
misconnected	Link is misconnected to the far-end.
blocked	Link is in blocked state.
fault	Link is in fault state.
far-end-tx-link-unusable	Far End Tx of the link is in an unusable state.
far-end-rx-link-unusable	Far End Rx of the link is in an unusable state.

Example: `near-end-rx-failure-status  =  no-failure`

Location: DS1-ATM-Stat { shelf-*N* slot-*N N*} > Ima-Link-Status

See Also: Far-End-Rx-Link-State, Far-End-Rx-Failure-Status, Invalid-Intervals.

Near-End-Rx-Link-State

Description: Indicates the near end Rx state of the link.

Usage: Valid values values for this read-only parameter are as follows:

Value	Description
not-in-group	Link is not part of an IMA group.
unusable-no-given-reason	Link is not usable but the reason is not known.
unusable-fault	Link is not usable because of a fault.
unusable-misconnected	Link is not usable because it is misconnected with the Far end.
unusable-inhibited	Link is not usable because it is in an inhibited state.
unusable-failed	Link is not usable because it is in failed state.
usable	Link is usable.
active	Link is active, part of an IMA group, and carrying traffic from the ATM layer.

Example: `far-end-rx-link-state = not-in-group`

Location: DS1-ATM -Stat { shelf-*N* slot-*N N*} > Ima-Link-Status

See Also: Far-End-Rx-Failure-Status, Near-End-Rx-Failure-Status, Near-End-Rx-Link-State, Near-End-Tx-Link-State

Near-End-Rx-Num-Failures-Counter

Description: Indicates the number of times a near-end receive failure alarm condition has been entered on this link. Such conditions include LIF, LODS, RFI-IMA, Mis-Connected and various forms of implementation-specific receive fault.

Usage: Valid range for this read-only value is from zero to 2147483647.

Example: `near-end-rx-num-failures-counter = 0`

Location: DS1-ATM-Stat { shelf-*N* slot-*N N*} > IMA-Link-Statistic

See Also: IMA-Violations-Counter

Near-End-Sev-Errored-Secs-Counter

Description: Indicates the count of 1-second intervals during which 30% or more of the IMA control protocol (ICP) cells were counted as IV-IMAs or had one or more link defects (for example, LOS, OOF/LOF, AIS, or LCD), LIF defects, or LODS defects, except during UAS-IMA condition. The count is for the current 15-minute interval.

Usage: Valid range for this read-only value is from zero (0) and 2147483647.

Example: `near-end-sev-errored-secs-counter = 0`

Location: DS1-ATM -Stat { shelf-*N* slot-*N N*} > Ima-Link-Statistic

See Also: Far-End-Tx-Num-Failures-Counter, Far-End-Tx-Unusable-Secs-Counter, IMA-Violations-Counter

Near-End-Tx-Link-State

Description: Indicates the near end transmission state of the link.

Usage: Valid values for this read-only value are

Value	Description
`not-in-group`	Link is not part of an IMA group.
`unusable-no-given-reason`	Link is not usable but the reason is not known.
`unusable-fault`	Link is not usable because of a fault.
`unusable-misconnected`	Link is not usable because it is misconnected with the far end.
`unusable-inhibited`	Link is not usable because it is in an inhibited state.
`unusable-failed`	Link is not usable because it is in failed state.
`usable`	Link is usable.
`active`	Link is active, part of an IMA group, and carrying traffic from the ATM layer.

Example: `near-end-tx-link-state = not-in-group`

Location: DS1-ATM-Stat { shelf-*N* slot-*N N*} > Ima-Link-Status

See Also: Far-End-Rx-Link-State, Far-End-Tx-Link-State, Rx-Lid

Near-End-Tx-Num-Failures-Counter

Description: Indicates the number of times a near-end transmit failure alarm condition (some form of implementation-specific transmit fault) has been entered on this link.

Valid range for this read-only value is from zero to 2147483647.

Example: `near-end-tx-num-failures-counter = 0`

Location: DS1-ATM-Stat { shelf-*N* slot-*N N*} > Ima-Link-Statistic

See Also: Near-End-Rx-Num-Failures-Counter

Near-End-Unavail-Secs-Counter

Description: Indicates the count of unavailable seconds at near-end. Unavailability begins at the onset of 10 contiguous SES-IMA and ends at the onset of 10 contiguous seconds with no ses-ima.

Usage: Valid range for this read-only value is from zero (0) to 2147483647.

Example: `near-end-unavail-secs-counter = 0`

Location: DS1-ATM-Stat { shelf-*N* slot-*N N*} > Ima-Link-Statistic

See Also: Far-End-Rx-Unusable-Secs-Counter, Far-End-Tx-Num-Failures-Counter, Far-End-Tx-Unusable-Secs-Counter, IMA-Violations-Counter, Near-End-Sev-Errored-Secs-Counter

Neighbor-Ip-Address

Description: Specifies the address of a Private Network-to-Network Interface (PNNI) neighbor reachable across this interface, to which a network management station can communicate.

Usage: Specify an address in dotted quad format. The default is the null address 0.0.0.0.

Example: `neighbor-ip-address = 0.0.0.0`

Location: ATM-If-Config { { any-shelf any-slot *N* } *N* } > Base-Config

See Also: Neighbor-Name

Neighbor-Name

Description: Specifies the textual name of the interface on the neighbor system.

Usage: Specify a plaintext string to designate the name.If the neighbor's interface does not have a name, this setting should be null (the default).

Example: `set neighbor-name = r2d2`

Location: ATM-If-Config { { any-shelf any-slot *N* } *N* } > Base-Config

See Also: Neighbor-Ip-Address

Network-Loopback

Description: Indicates whether there is a line looped back out to the network.

Usage: For this read-only parameter valid values are `true` and `false`: True indicates that a line is loopedback to the network. False indicates that no line is looped back to the network.

Example: `network-loopback = false`

Location: DS1-ATM-Stat { shelf-*N* slot-*N N*}

See Also: Ber-Receive, Carrier-Established, Cell-Delineation, IMA-Link-Statistic, IMA-Link-Status, Line-State, Loss-Of-CarrierLoss-of-Carrier

Network-Management-Enabled

Description: Indicates whether the network-management option is enabled.

Usage: The Network-Management-Enabled parameter is read only. Yes indicates that the network-management option is enabled. No indicates that the network-management option is disabled.

Example: `network-management-enabled = yes`

Location: Base

See Also: AIM-Enabled

Ne-Tx-Clk-Mode

Description: Specifies the mode of theinverse multiplexing ATM (IMA) Group Clocking.

Usage: Valid values are

Value	Description
ctc	Common transmit clock. Transmits clocks of the links within the IMA group are derived from the same clock source
itc	Independent transmit clock. Transmits clock of the links within the IMA group are derived from their respective receive clocks, as, for example, when Group-Symmetry-Mode is set to `symmetric-operation`.

Example: `set ne-tx-clk-mode = ctc`

Location: IMAgroup *name*

See Also: ATM-If-Delay, Group-Symmetry-Mode

Ne-Tx-Lid

Description: *Not currently used.* Specifies the transmit LID for the link

Usage: When this parameter becomes available, you will be able to specify a number from (0) zero to 31.

New-Nas-Port-Id-Format

Description: Specifies whether to use the new NAS port ID format.

Usage: Valid values are as follows:

- `Yes`—Specifies that the new NAS port ID format is used. This is the default.

- `No`—Specifies that the old NAS Port ID is used.

Example: `set new-nas-port-id-format = yes`

Location: System

NoAttr6-Use-Termsrv

Description: Specifies whether the unit initiates a terminal-server login if it does not receive RADIUS attribute 6 (User-Service).

Usage: Valid values are as follows:

- `Yes`—Specifies that the Stinger unit initiates a terminal-server login if Attribute 6 is not received, regardless of whether Attribute 7 is received or not. This is the default.

- `No`—Specifies that:

  - If Attribute 6 is not received, but Attribute 7 is received, a framed-protocol login is initiated.

  - If neither Attribute 6 nor 7 is received, a terminal-server login is initiated.

Example: The following commands in the example instruct the Stinger unit unit to start a framed-protocol login if Attribute 7 is received without Attribute 6:

```
admin> read external-auth
EXTERNAL-AUTH read
```

```
admin> set noattr6-use-termsrv = no
```

```
admin> write
EXTERNAL-AUTH written
```

Location: External-Auth

See Also: Acct-Type, Auth-Type, Local-Profiles-First, Rad-Acct-Client, Rad-Auth-Client, Rad-ID-Source-Unique

Node-Admin-Status

Description: Specifies the administrative status of a Private Network-to-Network Interface (PNNI) node.

Usage: With the default value of `up`, the node is allowed to become active. If the parameter is set to `down`, the node is forced to become inactive.

Example: `set node-admin-status = up`

Location: PNNI-Node-Config *N*

See Also: Curr-Node-Id, Curr-Node-Peer-Group-Id, Node-Index, Node-Level, Node-Id, Node-Lowest

Node-ATM-Address

Description: Specifies the network service access point (NSAP) ATM address that identifies the Stinger unit as a node within a PNNI network.

Usage: Remote systems that exchange PNNI protocol packets with the node direct packets or calls to this address.

Example: `set node-atm-address = 39:84:0f:80:01:bc:72:00:01:d0:6a:96:00:ff:d0:6a:96+`

Location: PNNI-Node-Config

See Also: Curr-Node-Id, Curr-Node-Peer-Group-Id, Node-Index, Node-Level, Node-Id, Node-Lowest

Node-Complex-Rep

Description: Enables/disables complex node representation. Refers to the representation of nodes in Private Network-to-Network Interface (PNNI). Complex representation provides information omitted in simple representation, but slows transmission.

Usage: With the default setting of `no`, simple node representation is used.

Example: `set node-complex-rep = Yes`

Location: PNNI-Node-Config *N*

See Also: Curr-Node-Id, Curr-Node-Peer-Group-Id, Node-Index, Node-Level, Node-Id, Node-Lowest

Node-Domain-Name

Description: Specifies the name of the PNNI routing domain.

Usage: All lowest-level PNNI nodes with the same domain name are presumed to be connected.

Example: `set node-domain-name = segundo`

Location: PNNI-Node-Config *N*

See Also: Curr-Node-Id, Curr-Node-Peer-Group-Id, Node-Index, Node-Level, Node-Id, Node-Lowest

Node-Id

Description: Specifies a 22-byte, 44-digit hexadecimal number that identifies the node within a peer group.

Usage: If both this parameter and the Node-Peer-Group- Id parameter have the default value of zero, the system derives the PNNI node ID from the node ATM address and other values. Or you can manually specify a node ID. For more information about node IDs and using aliases to specify them, see the *Stinger ATM Configuration Guide*.

Example: set node-id = 00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00+

Location: PNNI-Node-Config *N*

See Also: Curr-Node-Id, Curr-Node-Peer-Group-Id, Node-Index, Node-Level, Node-Lowest

Node-Index

Description: Specifies the PNNI node index.

Usage: Only node index 1 is currently supported.

Example: `node-index = 1`

Location: PNNI-METRICS { *N N* incoming *N* },PNNI-ROUTE-TNS { 0 other other 00:00:00:00 0 }, PNNI-Summary-Addr

See Also: Curr-Node-Id, Curr-Node-Peer-Group-Id, Node-Level, Node-Id, Node-Lowest

Node-Level

Description: Specifies the Private Network-to-Network Interface (PNNI) routing-level indicator.

Usage: Specify a number from 0 to 104, representing the level of the PNNI hierarchy at which this node exists.

Example: `set node-level = 96`

Location: PNNI-Node-Config *N*

See Also: Curr-Node-Id, Curr-Node-Peer-Group-Id, Node-Index, Node-Id, Node-Lowest

Node-Lowest

Description: Enables/disables lowest-level node status.

Usage: With the default `true` value, the node is a lowest-level node. *The `false` setting is not currently supported.*

Example: `set node-lowest = true`

Location: PNNI-Node-Config *N*

See Also: Curr-Node-Id, Curr-Node-Peer-Group-Id, Node-Index, Node-Level, Node-Id

Node-Peer-Group-Id

Description: Specifies a 14-byte, 28-digit hexadecimal number used to group nodes into a Private Network-to-Network Interface (PNNI) peer group.

Usage: All members of the same PNNI peer group have the same peer group ID. If both this parameter and the Node-Id parameter have the default value of zero, the system derives the PNNI peer group ID from the Asynchronous Transfer Mode (ATM) node address and other values. Or you can manually specify a peer group ID. For more information about peer group IDs and using aliases to specify them, see *Stinger Private Network-to-Network Interface (PNNI) Supplement*.

Example: set node-peer-group-id =
00:00:00:00:00:00:00:00:00:00:00:00:00:00

Location: PNNI-Node-Config *N*

See Also: Curr-Node-Id, Node-Index, Node-Level, Node-Id, Node-Lowest

Node-PGL

Description: A subprofile containing parameters for the configuration of the node peer group leader (PGL) in the Private Network-to-Network Interface (PNNI).

Usage: Following are the node peer group leader parameters, shown with default settings:

```
[in PNNI-NODE-CONFIG/1:node-pgl ]
leadership-priority = 0
parent-node-index = 0
init-time = 15
override-delay = 30
reelect-time = 15
```

Node-Restricted-Transit

Description: Specifies whether to enable or disable support of switched virtual channels (SVCs) transiting the node.

Usage: With the default false setting, the node allows transit of SVCs.

Example: Node-Restricted-Transit = false

Location: PNNI-Node-Config *N*

See Also: Curr-Node-Id, Curr-Node-Peer-Group-Id, Node-Index, Node-Level, Node-Id, Node-Lowest, Node-Svcc-Rcc.

Node-Scope-Mapping

Description: *Not currently used.* A PNNI-Node-Config subprofile for specifying scope mapping information for the node. for details about scope mapping see the *Stinger Private Network-to-Network Interface (PNNI) Supplement*.

Usage: Following are the scope mapping parameters, shown with default settings:

```
admin> list
[in PNNI-NODE-CONFIG/1:node-scope-mapping]
local-net = 96
local-net-plus-1 = 96
local-net-plus-2 = 96
site-minus-1 = 80
intra-site = 80
site-plus-1 = 72
organization-minus-1 = 72
intra-organization = 64
```

Location: PNNI-Node-Config *N*

See Also: PNNI-Node-Config (profile)

Node-Svcc-Rcc

Description: *Not currently used.* A PNNI-Node-Config *N* subprofile for specifying SVCC-based routing control channel (RCC) variables. Following is an example of the profile.

Example:

```
admin> list
[in PNNI-NODE-CONFIG/1:node-svcc-rcc ]
init-time = 4
retry-time = 30
calling-integrity-time = 5
called-integrity-time = 50traffic-descr-index = 0v
```

Location: PNNI-Node-Config *N*

See Also: PNNI-Node-Config (profile)

Node-Timer

Description: A PNNI-Node-Config *N* subprofile for specifying initial PNNI timer values and significant change thresholds for the node.

Usage: Use the Read and List commands to make this the current profile. Then use the Set command to enter changes. The following parameters (shown with default settings) configure timer values and significant change thresholds:

```
admin> list
[in PNNI-NODE-CONFIG/1:node-timer ]
ptse-holddown = 10
hello-holddown = 10
hello-interval = 15
hello-inactivity-factor = 5
hlink-inact = 120
ptse-refresh-interval = 1800
ptse-lifetime-factor = 200
rxmt-interval = 5
```

```
peer-delayed-ack-interval = 10
avcr-pm = 50
avcr-mt = 3
cdv-pm = 25ctd-pm = 50
```

Location: PNNI-Node-Config *N*

See Also: PNNI-Node-Config (profile)

Noise-Margin-Down

Description: Indicates the current downstream noise margin of the asymmetric digital subscriber line (ADSL) in decibels (dB).

Usage: The Noise-Margin-Down value is read only.

Example: `noise-margin-down = 6`

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Noise-Margin-Up

Noise-Margin-Up

Description: Indicates the current upstream noise margin of the asymmetric digital subscriber line (ADSL) in decibels (dB).

Usage: The Noise-Margin-Up value is read only.

Example: `noise-margin-up = 6`

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Noise-Margin-Down

Non-Real-Time-Vbr

Description: Enables/disables variable bit rate non-real time (NRT-VBR) traffic in the queue containing this parameter.

Usage: Valid values are as follows:

- `yes`—This queue supports ATM non-real-time variable bit rate (NRT-VBR) traffic.
- `no`—The queue does not support non-real-time variable bit rate traffic.This is the default.

For each queue, one or more ATM services categories can be set to `yes`. The Non-Real-Time-Vbr parameter must be set to `yes` for at least one and no more than two of the active queues assigned to a LIM, control module, or trunk.

Example: `set non-real-time-vbr = no`

Location: Controller-Static-Config > Atm-Parameters > Outgoing-Queue *N*

See Also: UBR, CBR

Notify-Tag-List

Description: Specifies the tag list which is specified by the Tag parameter value in each of the SNMPv3-Notification profile.

Usage: Specify the Tag value(s) you specified in one or more SNMPv3-Notification profiles.

Example: `set notify-tag-list = default1`

Location: Trap *name*

See Also: Active-Enabled, Host-Port, Msg-Proc-Model, Security-Level, Security-Model, Security-Name, Tag, Target-Params-Name

Ntr-Enabled

Description: Enables/disables Network Time Reference (NTR) functionality.

Usage: Valid values are as follows:

- `No`—Disables NTR functionality. This is the default.
- `Yes`—Enables NTR functionality.

Example: `set ntr-enabled = yes`

Dependencies: If the `unit-type` is central office equipment (`COE`), the system clock signal is used as the input and the customer premises equipment (CPE), if equipped to do so, can recover the clock.

If `unit-type` is CPE, the port outputs the recovered clock signal as the system clock if `clock-source` is set to `eligible` and `clock-priority` is set so that the clock can be selected.

Location: HDSL2 { shelf-*N* slot-*N N* }

See Also: Clock-Priority, Clock-Source

Num-Digits-Trunk-Groups

Description: Specifies the number of digits to allow for trunk groups.

Usage: Specify a number from 1 to 4. When you accept the default of 1, trunk-group numbers range from 2 to 9, and the dial-out telephone number is preceded by a single-digit number. If Num-Digits-Trunk-Groups is set to 2, 3, or 4, the range of trunk-group numbers can include the specified number of digits (up to 9999), and the dial-out telephone number is always preceded by that number of digits. For example, if you set `Num-Digits-Trunk-Groups` = 2, and you want the device to dial the number 555-1212 on trunk 7, the dial-out telephone string is 075551212.

Example: `set num-digits-trunk-groups = 2`

Dependencies: Consider the following:

- When the Stinger unit is configured to interoperate with an external application for dial-out, the external system and the Stinger unit must agree about the number of digits in

a trunk-group number. Otherwise, telephone numbers are not parsed correctly and calls fail.

- Use-Trunk-Groups must be set to Yes for Num-Digits-Trunk-Groups to have an effect.

- Currently, the IP-Fax server supports 2-digit trunk groups, but the trunk-group specification must be within the range of 2 to 9. The Stinger unit and the IP-Fax server must agree about the number of digits in a trunk group. Otherwise, telephone numbers are not parsed correctly and calls fail.

Location: System

See Also: Trunk-Group, Use-Trunk-Groups

Num-Sec-Invalid

Description: Indicates how many error seconds were detected during the continuous Bit Error-Rate Test (BERT).

Usage: The Num-Sec-Invalid value is read only.

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Status

See Also: Num-Sec-Valid

Num-Sec-Valid

Description: Indicates how many seconds were error-free during the continuous Bit Error-Rate Test (BERT).

Usage: The Num-Sec-Valid value is read only.

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Status

See Also: Num-Sec-Invalid

O

OAM-Support

Description: Enables/disables F4 Operations, Administration, and Maintenance (OAM) support on a virtual path connection (VPC). Currently only F4 OAM support is supported on Stinger units.

Usage: By default, the Oam-Support parameter is set to `yes`.

Example: `oam-support = yes`

Dependencies: You must also set the VP-Switching parameter to `yes` to enable F4 OAM support on the VPC.

Location: Connection > Atm-Options, Connection > Atm-Connect-Options

See Also: VC-Fault-Management, VP-Switching

OC3-ATM (profile)

Description: A profile containing configuration settings for the OC3-ATM interface.

Usage: Use the Read and List commands to make OC3-ATM the working profile:

```
admin> read oc3-atm/{ shelf-1 trunk-module-2 1 }]
OC3-ATM read
admin> list
[in OC3-ATM/{ shelf-1 trunk-module-2 1 }]
name = 1:18:1
physical-address* = { shelf-1 trunk-module-1 1 }
enabled = no
spare-physical-address = { any-shelf any-slot 0 }
sparing-mode = inactive
admin> list
[in OC3-ATM/{ any-shelf any-slot 0 }:line-config]
trunk-group = 0
nailed-group = 801
call-route-info = { any-shelf any-slot 0 }
loopback = no-loopback
framer-rate = STS-3c
framer-mode = sonet
tx-scramble-disabled = no
tx-cell-payload-scramble-disabled = no
loop-timing = no
vpi-vci-range = vpi-0-255-vci-32-8191
vc-switching-vpi = [ 0 0 0 0 0 0 0 ]
clock-source = not-eligible
clock-priority = middle-priority
```

You can then use the Set command to modify the settings in the profile. Enter the Write command to close the profile and save your changes:

```
admin> write
OC3-ATM written
```

See Also: Enable, Line-Config, Name, Physical-Address

OC3-ATM-Stat (profile)

Description: A profile that provides ATM framer status and error counters for an OC3 interface.

Usage: Use the Read and List commands to make OC3-ATM the working profile:

```
techpubs> read oc3-atm-stat { shelf-1 trunk-module-1 2 }
OC3-ATM-STAT/{ shelf-1 trunk-module-1 2 } read
techpubs> list
[in OC3-ATM-STAT/{ shelf-1 trunk-module-1 2 }]
physical-address* = { shelf-1 trunk-module-1 2 }
line-state = disabled
spare-physical-address = { any-shelf any-slot 0 }
sparing-state = sparing-none
sparing-change-reason = unknown
sparing-change-time = 0
sparing-change-counter = 0
vpi-vci-range = vpi-0-255-vci-32-8191
vc-switching-vpi = ""
loss-of-signal = False
loss-of-frame = False
out-of-frame = False
section-state = sonet-disabled
path-state = sonet-disabled
ais-receive = False
yellow-receive = False
out-of-cell-delineation = False
loss-of-cell-delineation = False
aps-receive = False
rsop-bip-error-count = 0
rlop-bip-error-count = rlop-febe-error-count = 0
rpop-bip-error-count = 0
racp-chcs-error-count = 0
racp-rx-cell-count = 0
tacp-tx-cell-count = 0
frequency-justification-count = 0
HEC-cell-drop-counter = 0
FIFO-overflow-counter = 0
idle-cell-counter = 0
valid-cell-counter = 0
performance-monitoring = { 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 }
interval-performance-monitoring = [ { 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 }+
```

OIF-Anomalies-Counter

Description: Indicates the number of out of IMA frame (OIF) anomalies in inverse multiplexing ATM (IMA), except during severely-errored-seconds IMA (SES-IMA) or unavailable seconds IMA (UAS-IMA) conditions, in the current 15-minute interval.

Usage: Valid range for this read-only value is from zero to 2147483647.

Example: `oif-anomalies-counter = 213`

Location: DS1-ATM-Stat { shelf-*N* slot-*N N*} > Ima-Link-Statistic

See Also: Elapsed-Seconds, Far-End-Unavail-Secs-Counter, Far-End-Sev-Errored-Secs-Counter, Far-End-Rx-Num-Failures-Counter, Far-End-Rx-Unusable-Secs-Counter

Only-One-Correction

Description: Enable/disable only one instead of many switching fabric corrections.

Usage: If set to No, switching fabric corrections can occur many times. One correction is recommended. The default is Yes.

Example: `set only-one-correction = no`

Location: System-Integrity > Integrity-Config

See Also: Encapsulation-Protocol, Enable-Continuous-Detection, Ratio-Centralized-Detection

Operational-Count

Description: Indicates the number of devices that are in the up state.

Usage: The Operational-Count setting is read only.

Example: `operational-count = 10`

Location: Device-Summary

See Also: Disabled-Count, Total-Count

Operational-Mode

Description: Indicates the mode in which the modem operates as automatically detected or as set by user.

Usage: Valid values for this read-only parameter are

- `ansi-dmt`
- `g.lite`
- `g.dmt`
- `unknown`

Example: `operational-mode = g.lite`

Location: AL-DMT-Stat { shelf-*N* slot-*N N* } > physical-status

Operational-Rate

Description: Indicates the data rate for the symmetrical interface to which this parameter applies.

Usage: The data rate is currently fixed at 1.544 Mbps.

Example: `set operational-rate = 1544`

Location: `HDSL2-Stat { shelf-N slot-N N } > physical-status`

See Also: `If-Group-Index, Unit-Type, Dev-Line-State`

Oper-Status

Description: Indicates the operational status of the reachable address and whether it is being advertised by this node.

Usage: Valid values for this read-only parameter are:

- `inactive`—The prefix is not reachable.
- `active`—The prefix is reachable and is not being advertised in PNNI.
- `advertised`—The prefix is reachable and is being advertised in PNNI.

Example: `set oper-status = inactive`

Location: PNNI-Route-Addr

See Also: Adv-Node-Id, Adv-Port-Id, Metrics-Tag, Originate-Advert, PTSE-Id-PTSE-Id, Type

Organization-Minus-1

Description: *Not currently used.* Specifies a number representing the highest level of the Private Network-to-Network Interface (PNNI) hierarchy that lies within the organization-minus-one scope.

Usage: When this parameter becomes available, you will be able to specify a number from 0 to 104. The default value is 72.

Location: PNNI-Node-Config *N* > Node-Scope-Mapping

Organization-Plus-1

Description: *Not currently used.* Specifies the highest level of the Private Network-to-Network Interface (PNNI) hierarchy that lies within the organization-plus-one scope.

Usage: When this parameter becomes available, you will be able to specify a number from 0 to 104. The default value is 64.

Location: PNNI-Node-Config *N* > Node-Scope-Mapping

Originate-Advert

Description: Specifies whether or not the reachable address should be advertised by the local node into its Private Network-to-Network Interface (PNNI) routing domain.

Usage: With the default `true` setting, the local node advertises reachability of the address.

Example: `originate-advert = true`

Location: PNNI-Route-Addr

See Also: Addr-Index, Adv-Node-Id, Adv-Port-Id, If-Index, Proto, PNNI-Scope

Out-Defect-Int-Time

Description: Specifies the time in milliseconds (ms) that must lapse before the failed state condition can be turned off. If the *no defect condition* persists for this time, the Rx Failed state machine leaves the *failed* state.

Usage: Valid values are from zero to 2147483647.

Example: `set out-defect-int-time = 10000`

Location: DS1-ATM { shelf-*N* slot-*N N*} > Line-Config > Ima-Option-Config > Rxlink-Config

See Also: Add-Link-Cond-Time, Defect-Ratio, Fault-Clearing-Time, Fault-Clearing-Type, In-Defect-Int-Time, Rec-Link-Cond-Time, Rx-Lid-Learning-Time

Outgoing-Cells

Description: Indicates the number of outgoing cells in an asymmetric digital subscriber (ADSL) line.

Usage: The outgoing-cells value is read only.

Example: `outgoing-cells = 100`

Location: AL-DMT-Stat { shelf-*N* slot-*N N* } > Physical-Statistic

See Also: Incoming-Cells

Outgoing-Queue *N*

Description: The Controller-Static-Config profile contains 62 subprofiles for setting various Asynchronous Transfer Mode (ATM) parameters for an outgoing queue. Each configured queue must be associated with an outgoing port which is either a LIM slot, a CM slot, or a trunk port. Each outgoing port can have multiple outgoing queues.

Usage: Following is a listing of the subprofile.

```
[in CONTROLLER-STATIC-CONFIG:atm-parameters:outgoing-queue[1]
(new)]
active = yes
name = 1:17:1
physical-address = { shelf-1 trunk-module-1 1 }
cbr = yes
real-time-vbr = no
non-real-time-vbr = no
ubr = no
high-priority-weight = 12
low-priority-weight = 0
admin> list ..outgoing-shaper 1
error: field name "..outgoing-shaper" unknown
admin> list ..
```

Outgoing-Shaper *N*

Description: The Controller-Static-Config profile contains 10 `outgoing-shaper` *N* subprofiles that configure the shapers available for the entire system. A trunk port might use zero, one, or more shaper(s) to shape outgoing ATM traffic with certain VPI(s).

Usage: Use the Dir, Read, and List commands to make Controller-Static-Config the current profile, and then list `Atm-Parameters` and `outgoing-shapers` *N*. For example:

admin> list outgoing-shaper 1

```
[in CONTROLLER-STATIC-CONFIG:atm-parameters:outgoing-shaper[1]
(new)]queue-index = 0
vpi = 1
bandwidth = 8000
```

Out-Of-Cell-Delineation

Description: Indicates whether the device is receiving a far-end loss-of-frame signal, also known as a *Yellow Alarm*.

Usage: The Out-Of-Cell-Delineation value is read only. Valid values are:

* `True`—Indicates that the device is receiving a far-end loss-of-frame signal.
* `False`—Indicates that the device is not receiving a far-end loss-of-frame signal.

Example: `out-of-cell-delineation = false`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: Out-Of-Frame

Out-Of-Frame

Description: Indicates whether the local line is up and in frame.

Usage: Valid values are true and false.

- `true` —Indicates that near end is out of frame.
- `false` —Indicates that the line is up and in frame.

Example: `out-of-frame = false`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: Loss-of-Frame, Out-Of-Cell-Delineation

Output-Power-Down

Description: Indicates the current downstream aggregate power level in decibels (dB).

Usage: The Output-Power-Down value is read only.

Example: `output-power-down = 19`

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Output-Power-Up

Output-Power-Up

Description: Indicates the current upstream aggregate power level in decibels (dB).

Usage: The Output-Power-Up value is read only.

Example: `output-power-up = 19`

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Output-Power-Down

Override-Delay

Description: In Private Network-to-Network Interface (PNNI) Peer Group Leader selection, `override-delay` specifies the number of seconds the node waits for itself to be declared the preferred PGL by unanimous agreement among its peers.

Usage: Specify the number of seconds. When unanimous agreement is not reached, `override-delay` specifies the number of seconds that will pass before the node considers a two-thirds majority as sufficient agreement to declare itself peer group leader, abandoning the attempt to get unanimous agreement.

Example: `set override-delay = 30`

Location: PNNI-Node-Config *N* > Node-Pgl

See Also: Init-Time, Leadership-Priority, Parent-Node-Index, Reelect-Time

Over-Subscription

Description: Specifies the allowed over-subscription to the line rate in the connection admission control (CAC).

Usage: Valid range of over-subscription is 0 to 10240. Over-subscription modifies the allowed bandwith on a port. The allowed bandwidth on the trunk port is equal to `line-rate` multiplied by `over-subscription` divided by 10 (`Line-rate * over-subscription/ 10`).

The default value of `over-subscription` is 10. This value limits the port to accept only connections that do not exceed `line-rate`. Values between 1 and 9 limit the allowed bandwidth to a value less than the `line-rate`.

Example: `set over-subscription = 50`

Dependencies: A value of zero (0) disables the port from taking part in any CAC. The bandwidth is advertised as 0.

Location: ATM-Config > Trunk-Cac-Config *N*

See Also: Line-Rate

P

Parallel-Dialing

Description: Specifies the number of call-setup requests the system sends to the network side at any given time.

Usage: Specify an integer from 1 to 64. If the Stinger unit has trouble establishing an initial connection at the full bandwidth for calls from the U.S. to another country, reduce Parallel-Dialing to a value of 1. For ADSL or SDSL operation, you must set Parallel-Dialing to the number of ADSL or SDSL interfaces. The default is 2.

Example: `set parallel-dialing = 12`

Dependencies: If the system is processing the maximum number of calls when it receives a new call request, it queues the request and processes it after the network side sends a call-proceeding message for a previous request.

Location: System

See Also: Dial-Number

Parent-Node-Index

Description: Specifies the number identifying the node that will represent this peer group at the next higher routing level, if this node becomes peer group leader (PGL).

Usage: The default zero value indicates that no parent node exists.

Example: `set parent-node-index = 0`

Location: PNNI-Node-Config *N* > Node-Pgl

See Also: Init-Time, Leadership-Priority, Override-Delay, Reelect-Time

Partial-Packet-Discard

Description: Specifies whether the remaining cells in a packet (except the last cell) should be discarded, if buffers become congested after some cells of a packet have been queued.

Usage: Valid values are as follows:

- `Yes`—Specifies that the remaining cells in a packet (except the last cell) should be discarded if buffers become congested after some cells of a packet have been queued. In addition, if congestion occurs when the unit is receiving the last cell of a packet, it discards the entire next packet. partial packet discard (PPD) relies on a higher layer to reject the partial packet when it is received.

- `No`—Specifies that none of the remaining cells in a packet should be discarded if buffers become congested after some cells of a packet have been queued. This is the default.

Dependencies: This parameters applies only to ATM adaptation layer 5 (AAL5) circuits.

Location: ATM-QoS

See Also: AAL-Type, Contract-Name, Early-Packet-Discard, QoS-Class

Password

Description: Specifies a password that the user must enter in order to log in.

Usage: Specify a text string of up to 20 characters. The default is null. The value you enter is case sensitive.

Example: `set password = mypw`

Location: User *name*

See Also: Security-Mode, System-Password, Telnet-Password

Password-Enabled

Description: Specifies whether all failed Telnet login attempts generate a trap.

Usage: Valid values are as follows:

- `Yes`—Specifies that all failed Telnet login attempts generate a trap. This is the default.
- `No`—Specifies that failed Telnet login attempts do not generate a trap.

Example: `set password-enabled = no`

Dependencies: When Password-Enabled=Yes, you must also set Security-Enabled=Yes for all failed Telnet login attempts to generate a trap.

Location: Trap *host-name*

See Also: Security-Enabled

Password-For-Direct-Access

Description: Specifies the password that the user must enter when Security-For-Direct-Access is set to Global.

Usage: Specify a password of up to 64 characters. The default is null.

Example: `set password-for-direct-access = mypassword`

Dependencies: Consider the following:

- If Security-For-Direct-Access is not set to Global, the Password-For-Direct-Access setting is ignored.
- If Direct-Access is set to No, Password-For-Direct-Access does not apply.

Location: Terminal-Server > Dialout-Configuration

See Also: Direct-Access, Port-For-Direct-Access

Password-Prompt

Description: Specifies the string the terminal server uses to prompt for the System-Password when authentication is in use and an interactive user initiates a connection.

Usage: Specify up to 15 characters. The default is `Password:`

Example: `set password-prompt = Your Password:`

Dependencies: If terminal services are disabled, Password-Prompt does not apply.

Location: Terminal-Server > Terminal-Mode-Configuration

See Also: Login-Prompt, Prompt, Prompt-Format, Terminal-Mode-Configuration, Third-Login-Prompt, Third-Prompt-Sequence

Path-State

Description: Indicates the state of the Synchronized Optical NETwork (SONET) path.

Usage: The Path-State value is read only.

Example: `path-state = sonet-path-active-no-defect`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: Section-State

P-Bit-Error-Count

Description: Indicates the number of P-bit parity errors received in Asynchronous Transfer Mode (ATM) error-checking since the last time the unit was reset. P-bit errors indicate that the unit received a P-bit code on the DS3 M-frame that differs from the locally calculated code.

Usage: The P-Bit-Error-Count value is read only.

Example: `set p-bit-error-count = 0`

Location: DS3-ATM-Stat {shelf-*N* slot-*N N*}

See Also: AIS-Receive, BPV-Error-Count, CP-Bit-Error-Count, FEB-Error-Count, F-Bit-Error-Count, Line-State, Loss-of-Frame, Loss-of-Signal, Yellow-Receive

PCM-Mode

Description: *Not currently used.* Specifies the number of active channels in a pulse code modulation PCM highway.

Usage: Valid values are

- `isdn`—Use 23 channels to carry the cells.
- `clear-channel`—Use 24 channels to carry the cells.

Example: `pcm-mode = isdn`

Location: DS1-ATM { shelf *N* slot *N N* } > Line-Config

See Also: Clock-Priority, Clock-Source, Encoding, Frame-Type

Peak-Cell-Rate-Cells-Per-Sec

Description: Indicates peak cell rate (PCR), which is the maximum number of cells allowed per second.

Usage: The value is read only. The PCR is calculated from the Peak-Rate-Kbits-Per-Sec setting and used in the internal Asynchronous Transfer Mode (ATM) configuration.

Example: `peak-cell-rate-cells-per-sec = 37`

Location: ATM-QOS

See Also: Peak-Rate-Kbits-Per-Sec

Peak-Rate-Kbits-Per-Sec

Description: Specifies the peak bit rate per second in kilobits per second (Kbps).

Usage: Specify a value appropriate for the type of traffic as follows:
- For constant bit rate (CBR) traffic, specify the static bit rate.
- For available bit rate (ABR), specify the maximum explicit rate.
- For variable bit rate (VBR), specify the upper boundary of the variable bit rate.

The default value is 16 Kbps. The range is from 0 to 155520 Kbps.

Example: set peak-rate-kbits-per-sec = 20

Location: ATM-QOS

See Also: Peak-Cell-Rate-Cells-Per-Sec

Peer-Delayed-Ack-Interval

Description: In Private Network-to-Network Interface (PNNI) specifies the minimum amount of time between transmissions of delayed PNNI topology state element (PTSE) acknowledgement packets.

Usage: Specify an integer in 100 millisecond units.

Example: set peer-delayed-ack-interval = 10

Location: PNNI-Node-Config *N* > Node-Timer

See Also: Hello-Holddown, Hello-Interval, Hello-Inactivity-Factor, PTSE-Holddown, PTSE-Lifetime-Factor, PTSE-Refresh-Interval

Performance-Monitoring

Description: A subprofile that provides cumulative Synchronous Optical Network (SONET) performance counters, which are reset at the end of every 15-minute interval.

Usage: With OC3-ATM-Stat as the working profile, list the Performance-Monitoring subprofile. For example:

```
admin> list
[in OC3-ATM-STAT/{ shelf-1 trunk-module-2 1 }:performance-monitoring]
sonet-section-errored-seconds=0
sonet-section-severely-errored-seconds=0
sonet-section-severely-errored-framing-seconds=0
sonet-section-coding-violations=0
sonet-line-errored-seconds=0
sonet-line-severely-errored-seconds=0
sonet-line-coding-violations=0
sonet-line-unavailable-seconds=0
sonet-far-end-line-errored-seconds=0
sonet-far-end-line-severely-errored-seconds=0
sonet-far-end-line-coding-violations=0
sonet-far-end-line-unavailable-seconds=0
sonet-path-errored-seconds=0
sonet-path-severely-errored-seconds=0
sonet-path-coding-violations=0
sonet-path-unavailable-seconds=0
sonet-far-end-path-errored-seconds=0
sonet-far-end-path-severely-errored-seconds=0
sonet-far-end-path-coding-violations=0
sonet-far-end-path-unavailable-seconds=0
```

You can then use the Set command to modify the settings in the subprofile. You can use the List command to close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

Perm-Conn-Upd-Mode

Description: Specifies under what circumstances the Stinger unit performs nonintrusive remote updates of the configurations of permanent connections.

Usage: Specify one of the following values:

- `all`—Specifies that, if they are fetched from the RADIUS server, all existing permanent connections will be torn down and reestablished following the update. This setting causes service interruption every time any nailed profile is updated or added. This is the default.

- `changed`—Specifies that only changed permanent connections will be torn down and reestablished.

Example: set perm-conn-upd-mode = changed

Location: System

See Also: Beta-IMA-Value, Delta-Cell-Delin-Value, Gamma-IMA-Value, Idle-Logout, Parallel-Dialing, Ses-Rate-Mode, Single-File-Incoming, System-Rmt-Mgmt, Use-Trunk-Groups

PF-Comp-Enabled

Description: *Not currently used.* Enable or disable Protocol Field Compression. Asynchronous only.

Location: Connection > PPP-Options

Phone-Number

Description: *Not currently used.* Specifies the number the Stinger unit dials to reach the switch.

Usage: The default is null. When this parameter becomes available, you will be able to specify a telephone number of up to 24 characters, limited to the following choice of characters: 1234567890()[]!z-*|

Example: set phone-number = 555-1234

Dependencies: If a nailed-up Frame-Relay data-link connection is in use, Phone-Number does not apply.

Location: Frame-Relay *fr-name*

PHS-Support

Description: Indicates whether support for the Personal Handyphone System (PHS) is enabled.

Usage: The PHS-Support setting is read only. Yes indicates that PHS support is enabled. No indicates that PHS support is disabled.

Example: phs-support = yes

Location: Base

See Also: Countries-Enabled, Max-Switched-VCC-VPI, Multi-Rate-Enabled, R2-Signaling-Enabled, Selectools-Enabled

Physical-Address

Description: Identifies the physical address of an interface.

Usage: The physical address has the format {*shelf slot item*}, where:

Syntax element	Specifies
`shelf`	Shelf in which the item resides. Since a Stinger Unit is a single-shelf system, the shelf number is always 1.
`slot`	Number of the item's expansion slot. Physical expansion slots are numbered from 1 to 16, starting with 1 for the slot just below the shelf controller module. The slot value `17`, `controller`, or `c` specifies the shelf controller module. For example, to address the first slot on shelf 1: `{ 1 1 0 }`
`item`	Item on the module. Items are numbered starting with #1 for the leftmost item on the module. An item number of 0 (zero) denotes the entire slot. For example, to address line #48 on an SDSL module in slot #2 on shelf 1: `{ 1 2 48 }`

In most cases, the value of Physical-Address is obtained from the system. However, you can clone a profile by reading an existing one and changing its physical address. Use the List and Set commands to modify the Physical-Address value. For example:

```
admin> list physical-address
[in SDSL/{ shelf-1 slot-1 1 }:physical-address]
shelf=shelf-1
slot=slot-9
item-number=37

admin> set shelf=shelf-2
```

As an alternative, you can just use the Set command. For example:

```
admin> set physical-address shelf=shelf-2
```

Location: Alarm *name,* AL-DMT {shelf-*N* slot-*N N*}, DS3-ATM {shelf-*N* slot-*N N*}, OC3-ATM {shelf-*N* trunk-module-*N N*}, OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}, SDSL {shelf-*N* slot-*N N*}, SDSL-Stat {shelf-*N* slot-*N N*}

See Also: Device-Address, Interface-Address, Item-Number, Shelf, Slot

Physical-Statistic

Description: A subprofile that reports statistics about a digital subscriber line (xDSL) interface.

Usage: The subprofile of each xDSL-Stat profile includes different parameters. following is an example of the SDSL Physical-Statistic subprofile.

```
admin> list
[in SDSL-STAT { shelf-1 slot-1 0 }:physical-statistic]
line-up-timer={ 1 13 55 }
rx-signal-present=yes
line-quality=15
up-dwn-cntr=0
self-test=passed
far-end-db-attenuation=4
```

```
firmware-startup-stage=normal-operation
bert-timer=2 minutes
bert-enable=no
bert-operation-state=stopped
bert-error-counter=0
```

You can then use the Set <parameter> ? command to display the syntax and definition of a parameter, and the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

admin> **list ..**

Location: AL-DMT-Stat {shelf-*N* slot-*N N*}, HDSL2-Stat {shelf-*N* slot-*N N*}, SDSL-Stat {shelf-*N* slot-*N N*}

See Also: Physical-Status

Physical-Status

Description: A subprofile that indicates the status of the RADSL or SDSL interface.

Usage: The following lists the Physical-Status subprofile:

```
admin> list physical-status
[in SDSL-STAT { shelf-1 slot-1 0 }:physical-status ]
if-group-index=0
unit-type=coe
dev-line-state=port-up
up-stream-rate=784000
down-stream-rate=784000
major-firmware-ver=13
minor-firmware-ver=2
hardware-ver=2
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

admin> **list ..**

Location: AL-DMT-Stat {shelf-*N* slot-*N N*}, HDSL2-Stat {shelf-*N* slot-*N N*}, SDSL-Stat {shelf-*N* slot-*N N*}

See Also: Physical-Statistic

Ping

Description: Enables and disables the terminal-server Ping command.

Usage: Valid values are as follows:

- Yes—Specifies terminal-server users to use the Ping command.

- No—Specifies the Ping command in the terminal-server interface. This is the default.

Example: set ping = yes

Location: Terminal-Server > Terminal-Mode-Configuration

See Also: SLIP, TCP, Telnet, Terminal-Mode-Configuration, Traceroute

Planned-Bitrate-Down

Description: Specifies the constant bit rate for downstream traffic when operator-controlled rate-adaptive mode is in effect.

Usage: Specify an integer from 0 to 15000 Kbps. The default value is 8000 Kbps for 12- and 24 port LIMs and 2272 Kbps for 48-port LIMs.

Example: `set planned-bitrate-down = 100`

Dependencies: Consider the following:

- Planned-Bitrate-Down does not apply when automatic-at-startup rate adaptation is in use on the line.
- If you set Planned-Bitrate-Down to a nonzero value in one subprofile, set Planned-Bitrate-Down to 0 (zero) in the other subprofile.

Maximum bit rate for downstream traffic, from 0 to 15,000 Kbps.

Location: AL-DMT {shelf-*N* slot-*N N*} > Fast-Path-Config,
AL-DMT {shelf-*N* slot-*N N*} > Interleave-Path-Config

See Also: Planned-Bitrate-Up

Planned-Bitrate-Up

Description: Specifies the constant bit rate for upstream traffic when operator-controlled rate-adaptive mode is in effect.

Usage: Specify an integer from 0 to 2000 Kbps. The default value is 512 Kbps for 12- and 24-port LIMs and 544 Kbps for 48-port LIMs.

Example: `set planned-bitrate-up = 100`

Dependencies: Consider the following:

- Planned-Bitrate-Up does not apply when automatic-at-startup rate adaptation is in use on the line.
- If you set Planned-Bitrate-Up to a nonzero value in one subprofile, set Planned-Bitrate-Up to 0 (zero) in the other subprofile.

Location: AL-DMT {shelf-*N* slot-*N N*} > Fast-Path-Config,
AL-DMT {shelf-*N* slot-*N N*} > Interleave-Path-Config

See Also: Planned-Bitrate-Down

PNNI-If (profile)

Description: Configures Private Network-to-Network Interfaces (PNNI). In addition to setting certain PNNI flags, the PNNI-If profile specifies service category values such as administrative weight. Administrative weight is a value used to specify preferential use of a link or node for a specific service category. It is one of the elements of topology state information exchanged among the nodes, along with a dynamic assessment of available bandwidth, assigned metrics, and other possible attribute values, all of which affect how the most efficient link is chosen at a given time.

Usage: Use the dir, read and list commands to make PNNI-IF the current profile. Then use the Set command to modify values. Following are the PNNI-If parameters, shown with default values:

```
[in PNNI-IF/{ { any-shelf any-slot 0 } 0 } ]
address* = { { any-shelf any-slot 0 } 0 }
if-node-index = 1
if-port-id = 0
if-aggr-token = 0
if-vp-capability = false
if-adm-weight-cbr = 5040
if-adm-weight-rt-vbr = 5040
if-adm-weight-nrt-vbr = 5040
if-adm-weight-abr = 5040
if-adm-weight-ubr = 5040
if-rcc-service-category = nrt-vbr
if-rcc-traffic-descr-index = 2
```

PNNI-If-Config (profile)

Description: Configures a Private Network-to-Network Interface (PNNI) .

Usage: Use the New and List commands to make PNNI-If-Config the current profile. Then use the Set command to modify values:

Example:

```
techpubs> new pnni-if-config
PNNI-IF-CONFIG/{ { any-shelf any-slot 0 } 0 } read
techpubs> list
[in PNNI-IF-CONFIG/{ { any-shelf any-slot 0 } 0 } (new)]
address* = { { any-shelf any-slot 0 } 0 }
if-node-index = 1
if-aggr-token = 0
if-vp-capability = true
if-adm-weight-cbr = 5040
if-adm-weight-rt-vbr = 5040
if-adm-weight-nrt-vbr = 5040
if-adm-weight-abr = 5040
if-adm-weight-ubr = 5040
if-rcc-service-category = nrt-vbr
if-rcc-qos-name = default-ctl
```

PNNI-Link-State

Description: Specifies the Private Network-to-Network Interface (PNNI) link state of the port.

Usage: Valid values for the link state are

- `not-configured`—No link state has been configured for the port
- `up`—Link state for the port is up
- `down`—Link state for the port is down

Example: PNNI-Link-State = Up

Location: ATM-IF -Stat { { *N N* } *N* }

PNNI-Metrics (profile)

Description: This profile for Private Network-to-Network Interface (PNNI) allows you to attach values of routing metrics and attributes to nodes, links, and reachable addresses.

Usage: Use the dir, read and list commands to make this the current profile. Following are the PNNI-Metrics listing, including a listing of its associated subprofile.

```
admin> list
[in PNNI-METRICS/{ 1 0 incoming 0 }]
metrics-index* = { 1 0 incoming 0 }
metrics-classes = 0
metrics-gcac-clp = clpequal0or1
metrics-admin-weight = 5040
metrics1 = 4294967295
metrics2 = 4294967295
metrics3 = 4294967295
metrics4 = 4294967295
metrics5 = 4294967295
metrics6 = 4294967295
metrics7 = 4294967295
metrics8 = 4294967295
active = no

admin> list metrics-index
[in PNNI-METRICS/{ 0 0 incoming 0 }:metrics-index (new)]
node-index = 1
metrics-tag = 0
metrics-direction = incoming
metrics-index = 0
```

PNNI-Node-Config (profile)

Description: Refers to Private Network-to-Network Interface (PNNI). The PNNI-Node-Config profile contains settings that affect PNNI network node operations.

Usage: All of its required parameters have default settings, so you might not have to modify the profile at all. Following are the top-level parameters, shown with default settings:

```
admin> list

[in PNNI-NODE-CONFIG/1]
node-index* = 1
node-level = 96
node-id =00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00+
curr-node-id =
48:a0:39:84:0f:80:01:bc:72:00:01:d0:6a:96:00:ff:d0:6a:+
node-lowest = true
node-admin-status = up
node-domain-name = ""
node-atm-address =
39:84:0f:80:01:bc:72:00:01:d0:6a:96:00:ff:d0:6a:96+
node-peer-group-id = 00:00:00:00:00:00:00:00:00:00:00:00:00:00
curr-node-peer-group-id = 48:39:84:0f:80:01:bc:72:00:01:00:00:00:00
node-restricted-transit = false
node-complex-rep = false
node-pgl = { 0 0 15 30 15 }
node-timer = { 10 10 15 5 120 1800 200 5 10 50 3 25 50 }
node-svcc-rcc = { 4 30 35 50 0 }
node-scope-mapping = { 96 96 35 80 80 72 72 64 64 64 48 48 32 0 0 }
```

PNNI-Route-Addr (profile)

Description: Pertains to Private Network-to-Network Interface (PNNI). In the
PNNI-Route-Addr profile you can configure reachable addresses. A *reachable address* is an
ATM address that is either directly reachable through one of the unit's interfaces, or is
reachable through an advertising node that the unit can reach. You can configure a static route
to a *reachable address prefix*, which enables the unit to reach all ATM addresses for end
systems and other nodes whose ATM addresses match the prefix. For more information see
Stinger Private Network-to-Network Interface (PNNI) Supplement.

Usage: Use the Dir, Read, and List commands to make PNNI-Route-Addr the current profile.
Following are the parameters, shown with default settings:

```
admin> list

[in PNNI-ROUTE-ADDR/""]
name* = ""
addr-index = { 1 00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:0+
if-index = 0
adv-node-id =
adv-port-id = 0
type = exterior
proto = other
pnni-scope = 0
vp-capability = false
metrics-tag = 0
ptse-id-ptse-id = 0
originate-advert = true
info = ""
oper-status = inactive
time-stamp = 0
active = no
```

```
[in PNNI-ROUTE-ADDR/"":addr-index]
node-index = 0
address = 00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00
prefix-len = 0
index = 0
```

PNNI-Route-Tns (profile)

Description: A profile used in configuring a Private Network-to-Network Interface (PNNI).
A *transit network* is one that lies between the networks of the two endpoints of a connection. A
connection's data transits the network, but does not originate or stop there. You configure a
static route to a reachable transit network in a PNNI-Route-Tns profile. For more information
see *Stinger Private Network-to-Network Interface (PNNI) Supplement*.

Usage: Following is a listing of the profile which includes a listing of its associated
subprofile.

```
admin> list
[in PNNI-ROUTE-TNS/{ 0 other other 00:00:00:00 0 } ]
tns-index* = { 0 other other 00:00:00:00 0 }
tns-if-index = 0
tns-advertising-node-id = 00:00:00:00:00:00:00:00:00:00:00:00:00:0+
tns-advertised-port-id = 0
tns-route-type = exterior
tns-pnni-scope = 0
tns-vp-capability = no
tns-metrics-tag = 0
tns-originate-advertisement = yes
active = no
[in PNNI-ROUTE-TNS/{ 0 other other "" 0 }:tns-index ]
node-index = 0
route-tns-type = other
route-tns-plan = other
route-tns-id = ""
route-tns-index = 0
```

PNNI-Scope

Description: Specifies the extent of the advertisement of reachability from the advertising
node to the address prefix.

Usage: The default value is 0. For information about scope, see *Stinger Private
Network-to-Network Interface (PNNI) Supplement*.

Example: `pnni-scope = 0`

Location: PNNI-Route-Addr

See Also: Addr-Index, Adv-Node-Id, Adv-Port-Id, If-Index, Metrics-Tag, PTSE-Id-PTSE-Id,
Oper-Status, Originate-Advert, VP-Capability

PNNI-Summary-Addr (profile)

Description: Used to explicitly configure summary addresses. Following are the profile's parameters, shown with default values:

Usage: Use the Dir and Read commands to make this the current profile. Then use the set command to modify values.

```
[in PNNI-SUMMARY-ADDR/""]
index-name* = ""
addr-index = { 1 internal-summary
00:00:00:00:00:00:00:00:00:00:00:00+
suppress = false
state = inactive
active = no
[in PNNI-SUMMARY-ADDR/"":addr-index]
node-index = 1
type = internal-summary
address =
00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00
prefix-len = 0
```

Use the Write command to save your changes and close the profile.

Poll-After-Retransmission

Description: Enables/disables sending a poll after retransmitting protocol data units (PDUs) before sending any further PDUs.

Usage: *Disabled by default*.

Example: `vpoll-after-retransmission = no`

Location: ATM-If-Sig-Params *N* > Qsaal-Options

See Also: Poll-Inact-Factor, Tkeepalive-Ms

Poll-Inact-Factor

Description: *ILMI is not supported with the current software version.* Specifies the number of consecutive polls on the interface for which no interim link management interface (ILMI) response message is received before ILMI connectivity is considered lost.

Usage: Valid settings are from 1 to 65535, with a default of 4.

Example: `poll-inact-factor = 4`

Location: ATM-If-Config { { any-shelf any-slot *N* } *N* } > Extension-Config

See Also: Poll-After-Retransmission

Pool

Description: Specifies the password for the POOLs pseudo user.

Usage: Enter up to 21 characters.

Example: set pool = yourpass

Location: External-Auth > Password-Profile

Port

Description: Specifies the port number, as follows:

- In the Terminal-Server profile, specifies the port on the login host to which the user connects in immediate mode.
- In a Log profile and Auxiliary-Syslog subprofile, specifies the destination port of the Syslog host.
- In a VCC-Members or VCC-Ident subprofile, indicates the port number of the module that owns the Virtual Channel Connection (VCC) on an Asynchronous Transfer Mode (ATM) link.

Usage: Specify a port number. For a Terminal-Server profile, the default is 0 (zero). For the Log profile, the default is 514. For a VCC-Members or VCC-Ident subprofile, the Port setting is read only.

Dependencies: The Port value in the Log profile affects all data streams. The Port value in each Auxiliary-Syslog subprofile affects the individual data stream directed to the device specified by the Host value, and overrides the value in the Log profile.

Location: ATMPVC-Stat *circuit-name* > VCC-Members > VCC-Members *N,*
ATMVCC-Stat *circuit-name* > VCC-Ident, Log,
Log > Auxiliary-Syslog > Auxiliary-Syslog *N*, Terminal-Server > Immediate-Mode-Options

See Also: Facility, Host, Immediate-Mode-Options, Save-Number, Service, Syslog-Enabled

Port-Enabled

Description: Specifies whether the Stinger unit sends trap-PDUs (protocol data units) to the Simple Network Management Protocol (SNMP) manager.

Usage: Valid values are as follows:

- Yes—Specifies that the Stinger unit sends trap-PDUs to the host specified by Host-Address.
- No—Specifies that the Stinger unit does not send trap-PDUs. This is the default.

Example: set port-enabled = yes

Location: Trap *host-name*

See Also: Alarm-Enabled, Community-Minus-1, Host-Name, Host-Name, Security-Mode

Port-For-Direct-Access

Description: Specifies a Telnet port number to use for direct-access dial-out service. To dial out, a local operator uses Telnet to connect to the specified port. When the connection to the modem is established, the user can issue AT commands to the modem as if connected locally to its asynchronous port.

Usage: Specify a port number from 5000 to 32767. The default is 5000.

Example: `port-for-direct-access = 5001`

Dependencies: If terminal services are disabled or Direct-Access is set to No, Port-For-Direct-Access does not apply.

Location: Terminal-Server > Dialout-Configuration

See Also: Dialout-Configuration, Direct-Access, Password-For-Direct-Access, Port-For-Direct-Access, Telnet

Port*N*

Description: Specifies a port on the second login host to which a TCP-Clear session attempts to connect.

Usage: Specify a port number. The default is 0 (zero).

The following example specifies two login host-port combinations:

```
admin> read connection fred
CONNECTION/fred read
admin> set tcp-clear-options host = mercury
admin> set tcp-clear-options host2 = venus
admin> set tcp-clear-options port = 155
admin> set tcp-clear-options port2 = 256
admin> write
CONNECTION/fred written
```

Dependencies: You can specify one port for each of four login hosts. If the TCP connection to the first specified host-port combination fails, the system attempts to connect to the next specified host and port. If the connection to the next host-port combination fails, the system attempts to connect to the third host and port, and so forth. If all connection attempts fail, the session terminates and the Stinger unit returns a TCP connection error to the dial-in client.

Location: Connection > Tcp-Options

See Also: Detect-End-Of-Packet, End-Of-Packet-Pattern, Force-56Kbps, Host, HostN, Port, Facility, Host, Immediate-Mode-Options, Save-Number, Service, Syslog-Enabled

Port-Num

Description: Identifies a trunk port within the system.

Usage: The Port-Num value is read only and has a maximum of 15 characters.

Example: `port-num = 1:17:1`

Location: ATM-Config > Trunk-Cac-Config

See Also: Line-Rate, Over-Subscription

Port-State

Description: Indicates the state of the physical port.

Usage: The state can be `not-configured`, `up`, or `down`.

Example: `Port-State = Up`

Location: ATM-If-Stat { {*N N* } *N* }

See Also: If-Number, Nailed-Group, PNNI-Link-State, Signalling-State

Power-Supply-Enabled

Description: Specifies whether the system generates a trap when a power supply module is added or removed.

Usage: Valid values are as follows:

- `Yes`—Specifies that the system generates a trap when a power supply module is added or removed. This is the default.
- `No`—Specifies that the system does not generate a trap when a power supply module is added or removed.

Example: `set power-supply-enabled = no`

Location: Trap *host-name*

See Also: Trap (profile)

PPP-Circuit

Description: Specifies whether PPP switching is enabled on the Stinger unit.

Usage: Valid values are as follows:

- `none`—Transparent PPP switching disabled. This is the default.
- `transparent`—Transparent PPP switching is enabled.

Example: `ppp-circuit = none`

Location: Connection > PPP-Options

See Also: Bi-Directional-Auth, LQM, LQM-Maximum-Period, LQM-Minimum-Period, MTU, PPP-Circuit-Name, Send-Password

PPP-Circuit-Name

Description: Specifies the name of a PPP circuit.

Usage: Specify an ASCII string with a maximum length of 15 characters.The default is "" (NULL string). Characters are limited to the character set that is used for the Frame Relay circuit name. A PPP transparent circuit consists of two (2) linked connections. The connections are configured by setting PPP-Circuit to transparent, which enables the interface to be part of the PPP circuit. Note that encapsulation must be ppp. The connections are linked together by specifying the same PPP-Circuit-Name value for the 2 connections which form the PPP circuit.

Example: set PPP-Circuit-Name = firstpppcircuit

Dependencies: This parameter is ineffective unless PPP-Circuit parameter is set.

For IDSL, if you do not specify a circuit name the Stinger unit creates a circuit name based on the values of the VPI, Vci, and Nailed-Group parameters set in the ATM-Connect-Options subprofile. If you specify a circuit name, it overrides the default name created by the Stinger unit.

Location: Connection > PPP-Options

See Also: Bi-Directional-Auth, LQM, LQM-Maximum-Period, LQM-Minimum-Period, MTU, PPP-Circuit-Name, Send-Password

PPP-Options

Description: A subprofile that contains settings for Point-to-Point Protocol (PPP) calls. The Stinger unit also uses the PPP-Options settings for the PPP variants, Multilink PPP (MP) and Multilink Protocol Plus (MP+).

Usage: The following are parameters shown in the PPP-Options subprofile, shown with their default values:

Example:

```
mitch-admin->new conn
CONNECTION/"" read
mitch-admin->list ppp-options
[in CONNECTION/"":ppp-options (new)]
send-auth-mode = no-ppp-auth
ppp-circuit = none
ppp-circuit-name = ""
bi-directional-auth = none
send-password = ""
substitute-send-name = ""
recv-password = ""
substitute-recv-name = ""
enabled = yes
fill-1 = 0
link-compression = stac
mru = 1524
lqm = no
```

```
disconnect-on-auth-timeout = yes
lqm-minimum-period = 600
lqm-maximum-period = 600
acf-comp-enabled = no
pf-comp-enabled = no
async-control-char-map = ff:ff:ff:ff
split-code-dot-user-enabled = no
mtu = 1524
max-pap-auth-retry = 0
```

Location: Connection > PPP-Options

Precedence

Description: Specifies the priority level of the data stream.

Usage: The three most significant bits of the Type-of-Service (TOS) byte are priority bits used to set precedence for priority queuing. When TOS is enabled, you can set those bits to one of the following values (most significant bit first):

- 000—Specifies normal priority. This is the default.
- 001—Specifies priority level 1.
- 010—Specifies priority level 2.
- 011—Specifies priority level 3.
- 100—Specifies priority level 4.
- 101—Specifies priority level 5.
- 110—Specifies priority level 6.
- 111—Specifies priority level 7 (the highest priority).

Example: `set precedence = 001`

Dependencies: For the Precedence setting to apply, you must set Active=Yes in the TOS-Options subprofile.

Location: Connection *station* > IP-Options > TOS-Options

See Also: Apply-To, Type-of-Service

Preference

Description: Specifies the preference for the route. When choosing the routes to put in the routing table, the router first compares their preference values, preferring the lowest number. If the preference values are equal, the router compares the metric values, using the route with the lowest metric.

Usage: Specify a number from 0 to 255. A value of 255 prevents the use of the route, and is valid only for a WAN route specified by a Connection profile. Following are the default preferences for different types of routes:

- 0—Connected routes
- 30—Routes learned from ICMP redirects

- `100`—Routes learned from RIP
- `100`—Static routes

Example: `set preference = 100`

Location: Connection *station* > IP-Options, IP-Route *name*

See Also: Down-Preference, IP-Options, RIP-Pref, Static-Pref

Preferred-Source

Description: Subprofile for configuring the address of a device within the system. Calls that originate at the preferred-source may be routed to the indexed destination.

Usage: Folowing is a listing of the preferred source subprofile.

```
[in CALL-ROUTE/{ { { shelf-1 any-slot 0 } 0 } 0 }:preferred-source]
physical-address = { any-shelf any-slot 0 }
logical-item = 0
```

Prefix-Len

Description: Specifies the length of the reachable Asynchronous Transfer Mode (ATM) address prefix.

Usage: Specify a number from 0 to 152.

Example: `set prefix-len = 50`

Location: PNNI-Route-Addr, PNNI-Summary-Addr *name* > Addr-Index

See Also: Bandwidth-Monitor-Direction, Base-Channel-Count, Decrement-Channel-Count, Dynamic-Algorithm, Increment-Channel-Count, Maximum-Channels, Minimum-Channels, Seconds-History, Summarize-RIP-Routes, Target-Utilization, Index

Previous-Trunk-Daughter-Type

Description: Specifies the previous type of trunk daughter module in this device, if there was one.

Usage: Valid values are as follows:

- `trunk-daughter-none`
- `trunk-daughter-oc3-quad`
- `trunk-daughter-ds3`
- `trunk-daughter-oc3-ds3-combo`
- `trunk-daughter-oc3-single`
- `trunk-daughter-ds3-single`
- `trunk-daughter-e3`
- `trunk-daughter-e3-single`

Example: `Set previous-trunk-daughter-card = trunk-daughter-e3`

Location: Trunk-Daughter-Dev {shelf *N* slot *N N*}

See Also: Device-State, Trunk-Daughter-Type

Primary-Preference

Description: Specifies the preference level for electing this Control Module as primary at the next system reset.

Usage: Valid values are as follows:

- `may-be-primary`—Specifies that the control module is capable of being the primary control module. This is the default.
- `must-be-primary`—Specifies that the control module must be primary, but the flag indicating this setting is cleared every time a primary is elected.
- `must-always-be-primary`—Specifies that if the current control module is up, it must always be the primary CM.

Example: `set primary-preference = must-always-be-primary`

Location: Redundancy > Context > Context *N*

See Also: Must-Agree

Primary-SDTN-Empty-Enabled

Description: Specifies whether theshort-duration transaction network (SDTN) primary list empty trap is enabled.

Usage: Valid values are as follows:

- `Yes`—Specifiesthat the SDTN primary list empty trap is enabled. This is the default.
- `No`—Specifies that the SDTN primary list empty trap is not enabled.

Example: `set primary-sdtn-empty-enabled = no`

Location: Trap *name*

See Also: Secondary-SDTN-Empty-Enabled

Private-Route

Description: Specifies whether the Stinger unit advertises route information.

Usage: Valid values are as follows:

- `Yes`—Specifies that the route is private. The unit uses the route internally, but does not advertise it.
- `No`—Specifies that the unit advertises the route by means of routing protocols. This is the default.

Example: `set private-route = yes`

Location: IP-Route *name*, Connection *station* > IP-Options

See Also: IP-Options, IP-Routing-Enabled, RIP, RIP-Mode

Priv-Key

Description: Specifies a privacy key for SNMPv3 USM users.

Usage: In most cases, you do not set this string directly. Instead, use the snmpPrivPass command to generate the value. If you have permission to view passwords, the privacy key appears as a string with escape sequences for save and restore purposes. Otherwise, the privacy key appears as a row of asterisks. The default is null.

If you change the value of Priv-Key directly, keep in mind that the length of the escape sequence must be 10 (16d in hexadecimal) if Message Digest 5 (MD5) is in use and 14 (20d in hexadecimal) if the Secure Hash Algorithm (SHA) is in use. If you specify an invalid value, the unit uses the previous key, if any, to communicate with the SNMP manager. If no previous key exists, this USM user cannot communicate with the network until a valid key is generated by means of the snmpPrivPass command.

Example: Suppose you use the snmpPrivPass command to generate the following 16-byte string:

```
27 0a dc 75 f8 98 e5 7c 4c 03 22 7d dd ac 0d ef
```

The system displays it as the following Priv-Key value:

```
'\x0a\xdcu\xf8\x98\xe5|L\x03"}\xdd\xac\x0d\xef
```

Dependencies: Consider the following:

*   You must generate the privacy key by means of the snmpPrivPass command before the SNMPv3-USM-User profile can be used for communication with the SNMP manager.

*   If you change the authentication protocol from MD5 to SHA (or vice versa), you must change the privacy key by means of the snmpPrivPass command. The previous protocol and key combination is used until you specify a new one.

Location: SNMPv3-USM-User *name*

See Also: Auth-Key

Priv-Password

Description: Specifies the privacy password for generating the private key for Data Encryption Standard (DES) encryption.

Usage: Specify a text string. The default is null.

Example: set priv-password = homer

Dependencies: Priv-Password applies only if Priv-Protocol is set to DES-Priv.

Location: SNMPv3-USM-User

Priv-Protocol

Description: Specifies whether messages sent on behalf of the user to and from the Simple Network Management Protocol (SNMP) engine can be protected by encryption and, if so, the type of privacy protocol to be used.

Usage: Valid values are as follows: :

- `no-priv`—Specifies that no encryption is required and that privacy is disabled. This is the default.

- `des-priv`—Specifies that DES-based privacy is required. Incoming messages that are DES-encrypted are interpreted. Stinger unit uses DES to encrypt outgoing responses. Note that outgoing reports are not encrypted.

Example: priv-protocol = des-priv

Location: SNMPv3-USM-User

See Also: Priv-Password

Profiles-Required

Description: Specifies whether the Stinger unit rejects incoming calls for which it could find neither a Connection profile nor an entry on a remote authentication server. If you do not require a configured profile for all callers, the Stinger unit builds a temporary profile for unknown callers. Many sites consider the use of a temporary profile a security breach, and require that all callers have a configured profile.

Usage: Valid values are as follows:

- `Yes`—Specifies that the Stinger unit requires a configured profile for all callers. The unit rejects calls for which it cannot find a configured profile. This is the default.

- `No`—Specifies that if the Stinger unit cannot find a configured profile, it creates a temporary profile for the caller.

Example: `set profiles-required = no`

Dependencies: You cannot set Profiles-Required for terminal-server calls.

Location: Answer-Defaults

See Also: Use-Answer-For-All-Defaults

Prompt

Description: Specifies a string that the Stinger unit uses as a command-line prompt.

Usage: Specify a string to be used as a prompt. You can specify up to 15 characters. In a User profile, the default is an asterisk, which causes the Stinger unit to substitute the value of the profile's name upon successful login.

Example: `set prompt = virginia>`

Location: Terminal-Server > Terminal-Mode-Configuration, User *name*

See Also: Login-Prompt, Password-Prompt, Prompt-Format, Terminal-Mode-Configuration, Third-Login-Prompt, Third-Prompt-Sequence

Prompt-Format

Description: Specifies whether the Stinger unit interprets carriage-return/linefeed and tab characters in the string specified by Login-Prompt.

Usage: Valid values are as follows:

- `Yes`—Specifies that the Stinger unit interprets carriage-return/linefeed and tab characters in the string specified by Login-Prompt.

- `No`—Specifies that the Stinger unit ignores carriage-return/linefeed or tab characters in the string specified by Login-Prompt.

Example: `set prompt-format = no`

Dependencies: If terminal services are disabled, Prompt-Format does not apply.

Location: Terminal-Server > Terminal-Mode-Configuration

See Also: Login-Prompt, Password-Prompt, Terminal-Mode-Configuration, Third-Login-Prompt, Third-Prompt-Sequence

Proto

Description: Specifies the mechanism by which the advertising node learned of reachability to the address prefix.

Usage: Valid values areas follows:

- `other`—unspecified. This is the default.

- `local`—Specifies a local routing protocol such as interim link management interface (ILMI)

- `mgmt`—Specifiesa management protocol such as simple network management protocol (SNMP)

- `pnni`—SpecifiesATM ForumPrivate Network-to-Network Interface (PNNI) dynamic routing protocol

Example: `set proto = other`

Location: PNNI-ROUTE-ADDR

See Also: Addr-Index, Adv-Node-Id, Adv-Port-Id, If-Index, PNNI-Scope

Proxy-Mode

Description: Specifies under what conditions the Stinger unit responds to Address Resolution Protocol (ARP) requests with its own Media Access Control (MAC) address. The main use of proxy ARP on the Stinger unit is for dial-in hosts to which the Stinger unit supplies IP addresses, such as Serial Line Internet Protocol (SLIP) connections. However, you only need to use proxy ARP if both the following conditions are true:

- • The supplied IP addresses are within the local subnet of the Stinger unit.

- • The hosts on the local subnet need to send packets to the dial-in hosts.

Usage: Specify one of the following values:

- • Off—Specifies that the Stinger unit does not proxy any addresses. This is the default.

- • Active—Specifies that the Stinger unit responds to an ARP request with its own MAC address if the request matches an active Connection profile over which the Stinger unit routes IP.

- • Inactive—Specifies that the Stinger unit responds to an ARP request if the request matches the IP address of any inactive Connection profile over which the Stinger unit routes IP.

- • Always—Specifies that the Stinger unit responds to an ARP request with its own MAC address if the request matches any IP address to which the Stinger unit has a route.

Example: `set proxy-mode = inactive`

Location: IP-Interface

See Also: RARP-Enabled

PSD-Frequency-Level

Description: Reports test results concerning noise in the copper loop test (CLT).

Usage:

Noisetest type	Data reported
Background noise test, PSD mode	Data consists of 371 pairs of PSD test data. The first number in each pair is the test frequency in kHz. The second number in each pair is the noise level in dBm/Hz.
Background noise test, E, F, or G mode	A single value representing aggregated noise in hundreths (.01) dBm.
Insertion loss test	Data consists of 371 pairs of test data. The first number in each pair is the test frequency in kHz. the second number in each pair is the loss in hundreths (.01) dB.
Signal to noise test	Data consists of 371 pairs of test data. The first number in each pair is the test frequency in kHz. The second number in each pair is the S/N ratio in hundreths (.01) dB.

Example: `psd-frequency-level = [ { 4 -7892 } { 9 -3849 } { 13 -3849 } { 17 -3422 } { 22 +`

Location: CLT-Result

See Also: Impulse-Noise-Read-Low-Threshold

PTSE-Holddown

Description: Pertains to Private Network-to-Network Interface (PNNI). Specifies the initial value *n* 100-millisecond units for the PNNI topology state element (PTSE) hold-down timer used by the node to limit the rate at which it can send PTSEs.

Usage: Specify a positive non-zero number. The default is 10.

Example: `set ptse-holddown = 8`

Location: PNNI-Node-Config *N* > Node-Timer

See Also: Hello-Holddown, Hello-Inactivity-Factor, Hello-Interval, Hlink-Inact, Peer-Delayed-Ack-Interval, PTSE-Refresh-Interval, PTSE-Lifetime-Factor, Rxmt-Interval

PTSE-Lifetime-Factor

Description: Pertains to the PNNI topology state element (PTSE) of the Private Network-to-Network Interface (PNNI). Specifies the multiplier, expressed as a percentage, by which the system multiplies the PTSE-Refresh-Interval value to obtain the initial lifetime to place into self-originated PTSEs.

Usage: Specify a percentage by which the PTSE-refresh-value is multiplied. The product is assigned to self-originated PTSEs. The default is 200

Example: `set ptse-lifetime-factor = 150`

Location: PNNI-Node-Config *N* > Node-Timer

See Also: Hello-Holddown, Hello-Inactivity-Factor, Hello-Interval, Hlink-Inact, Peer-Delayed-Ack-Interval, PTSE-Refresh-Interval, Rxmt-Interval

PTSE-Id-PTSE-Id

Description: Specifies the PNNI topology state element (PTSE) identifier (ID) of the PNNI topology state element (PTSE). This id is originated by the node that contains the information group(s) describing the reachable address.

Usage: For reachable addresses learned by means other than PNNI, the default zero value is required.

Example: `ptse-id-ptse-id = 0`

Location: PNNI-Route-Addr

See Also: Addr-Index, Adv-Node-Id, Adv-Port-Id, If-Index, PNNI-Scope, Proto, Type

PTSE-Refresh-Interval

Description: Specifies the value, in seconds, for the Refresh timer. This value is used to determine how often to originate PNNI topology state elements (PTSEs) in the absence of triggered updates.

Usage: Specify the number of seconds. The default is 1800.

Example: `set ptse-refresh-interval = 1700`

Location: PNNI-Node-Config *N* >Node-Timer

See Also: Hello-Holddown, Hello-Inactivity-Factor, Hello-Interval, Hlink-Inact, Peer-Delayed-Ack-Interval, PTSE-Lifetime-Factor, Rxmt-Interval

PVC-Failure-Intvl

Description: Specifies the minimum number of seconds between the sending of permanent virtual circuit (PVC) failure trap notifications.

Usage: Valid settings are from 0 to 3600. The default is 30 seconds.

Example: `set pvc-failure-intvl = 40`

Location: ATM-If-Config { { any-shelf any-slot *N* } *N* } > Extension-Config

See Also: PVC-Failure-Trap-Enabled

PVC-Failure-Trap-Enabled

Description: Specifies whether the generation of traps in response to permanent virtual circuit (PVC) failures on this interface is enabled.

Usage: Valid values are as follows:

- `Yes`—Specifies that the generation of traps in response to PVC failures on this interface is enabled.

- `No`—Specifiesthe generation of traps in response to PVC failures on this interface is enabled. This is the default.

Example: `set pvc-failure-trap-enabled  =  yes`

Location: ATM-If-Config { { any-shelf any-slot *N* } *N* } > Extension-Config

See Also: PVC-Failure-Intvl

PVC-Type

Description: Indicates the type of permanent virtual circuit (PVC) in use on an Asynchronous Transfer Mode (ATM) connection.

Usage: The PVC-Type value is read only. Valid values are as follows:

- `connecting`—Indicates that the PVC is a point-to-point connection.

- `terminating`—Indicates that the PVC terminates on this platform.

Location: ATMPVC-Stat *circuit-name*

See Also: VCC-Type

Q

Q2931-options

Description: A subprofile of the ATM-If-Sig-Params profile.

Usage: Use the Dir and Read command to make ATM-If-Sig-Params the current profile, and then the List command to display the Q2931-options.

```
mitch-admin->list q293
[in ATM-IF-SIG-PARAMS/{ { any-shelf any-slot 0 } 0
}:q2931-options (new)]
max-restart = 2
max-stateng = 1
t301-ms = 180000
t303-ms = 4000
t306-ms = 30000
t308-ms = 30000
t309-ms = 10000
t310-ms = 10000
t313-ms = 30000
t316-ms = 120000
t317-ms = 60000
t322-ms = 4000
t331-ms = 60000
t333-ms = 10000
t397-ms = 180000
t398-ms = 4000
t399-ms = 14000
saal-retry-ms = 10000
t303-num-reties = 1
t308-num-retries = 1
t316-num-retries = 1
t322-num-retries = 1
t331-num-retries = 1
assign-vpi-vci = yes
```

QoS-Class

Description: Specifies the Asynchronous Transfer Mode (ATM) service class for the quality of service (QoS) contract. Also referred to as ATM service category.

Usage: Valid values are as follows:

- CBR—Specifies Constant Bit Rate, a service class for connections that depend on precise clocking to ensure undistorted delivery of bits. This is the default.

- VBR-RT—Specifies Variable Bit Rate-Real Time), a service class that handles the packaging of special delay-sensitive applications (such as packet video) that require low cell-delay variation between endpoints.

- VBR-NRT—Specifies Variable Bit Rate Non-Real Time, a service class that handles packaging for the transfer of long, bursty data streams over a pre-established ATM connection.

- UBR—Specifies Unspecified Bit Rate, a service class that handles bursty LAN traffic, as well as data that accepts delays and cell loss. It is a best-effort service that does not specify bit rates or traffic values, and offers no QoS guarantees.

Example: `set qos-class = ubr`

Dependencies: If Encapsulation-Protocol is not set to ATM or ATM-Circuit, QoS-Class does not apply.

Location: ATM-QoS

QoS-Contract

Description: Specifies the Asynchronous Transfer Mode (ATM) Quality of Service (QoS) contract for the connection.

Usage: Supported values are CBR (constant bit rate), Real-Time-VBR (variable bit rate-real-time), Non-Real-Time-VBR (variable bit rate-nonreal time), ABR (Available Bit Rate), and UBR (unspecified bit rate). The default value is CBR.

Example: `set qos-contract = cbr`

Dependencies: If Encapsulation-Protocol is not set to ATM or ATM-Circuit, QoS-Contract does not apply.

Location: Connection > ATM-Options, Connection > ATM-Connect-Options

See Also: Contract-Name

Queue-Depth

Caution: Specifies the number of packets that can be held for transmission for Simple Network Management Protocol (SNMP) requests. Packets in excess of this number will be dropped.

Usage: Specify a number from 0 to 65535. The default is 0, which specifies that the Stinger unit does not drop packets, no matter how far behind the SNMP subsystem gets. If the queue were to grow too large in a heavily loaded environment, the system could run out of memory.

Example: `set queue-depth = 25`

Dependencies: When setting this value, you are trading memory resources for SNMP retries in the event that the Stinger unit is busy and falls behind in transmitting the SNMP packets.

Location: SNMP

See Also: RIP-Queue-Depth

Queue-Index

Description: Specifies the queue of the outgoing trunk port that is associated with the virtual path identifier (VPI) of the path whose traffic is shaped. An additional, separate queue must be specified in the `outgoing-queue N` subprofile before this parameter is set.

Usage: Specify a number from 0 to 62. A value of zero inactivates the shaper.

Example: set queue-index = 5

Location: Controller-Static-Config > Atm-Parameters > Outgoing-Shaper

See Also: Outgoing-Shaper N

Qsall-Options

Description: A subprofile of the ATM-If-Sig-Params profile.

Usage: Use the Dir and Read commands to make ATM-If-Sig-Params the current profile, and then list Qsaal-Options. Following is an example listing of this subprofile.

```
admin> list
[in ATM-IF-SIG-PARAMS/0:qsaal-options]
window-size = 50
max-cc = 4
max-pd = 25
max-stat = 67
tcc-ms = 1000
tpoll-ms = 0
tkeepalive-ms = 0
tnoresponse-ms = 0
tidle-ms = 15000
poll-after-retransmission = no
repeat-ustat = no
ustat-rsp-to-poll = no
```

R

R2-Signaling-Enabled

Description: Indicates whether R2 signaling is enabled.

Usage: The R2-Signaling-Enabled setting is read only. `Yes` indicates that R2 signaling is enabled. `No` indicates that R2 signaling is not enabled.

Example: `r2-signaling-enabled = no`

Location: Base

See Also: AIM-Enabled, Countries-Enabled, Data-Call-Enabled, D-Channel-Enabled, MaxLink-Client-Enabled, Multi-Rate-Enabled, Switched-Enabled

RACP-CHCS-Error-Count

Description: Indicates the number of receive ATM cell processor (RACP) correctable header check sequence (CHCS) errors. The RACP delineates ATM cells and filters cells on the basis of their idle status, unassigned status, or HCS errors. It also descrambles the cell payload.

Usage: The RACP-CHCS-Error-Count value is read only.

Example: `racp-chcs-error-count = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: RACP-CHCS-Error-Count

RACP-Rx-Cell-Count

Description: Indicates the receive ATM cell processor (RACP) receive cell count.

Usage: The RACP-RX-Cell-Count value is read only.

Example: `Racp-rx-cell-count = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: TACP-TX-Cell-Count

RACP-UCHCS-Error-Count

Description: Indicates the number of receive ATM cell processor (RACP) uncorrectable header check sequence (UCHCS) errors. The RACP delineates ATM cells and filters cells on the basis of their idle status, unassigned status, or HCS errors. It also descrambles the cell payload.

Usage: The RACP-UCHCS-Error-Count value is read only.

Example: `RACP-UCHCS-Error-Count = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: RACP-CHCS-Error-Count

Rad-Acct-Client

Description: A subprofile that enables you to define how the Stinger unit interacts as a client to RADIUS accounting servers.

Usage: With External-Auth as the working profile, list the Rad-Acct-Client subprofile. For example:

```
admin> list rad-acct-client
[in EXTERNAL-AUTH:rad-acct-client]
acct-server-1=0.0.0.0
acct-server-2=0.0.0.0
acct-server-3=0.0.0.0
acct-port=0
acct-src-port=0
acct-key=""
acct-timeout=0
acct-sess-interval=0
acct-id-base=acct-base-10
acct-limit-retry=0
acct-drop-stop-on-auth-fail=no
acct-stop-only=yes
acct-radius-compat=old-ascend
acct-reset-time=0
acct-checkpoint=0
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: External-Auth

See Also: Acct-Drop-Stop-On-Auth-Fail, Acct-ID-Base, Acct-Key, Acct-Limit-Retry, Acct-Port, Acct-RADIUS-Compat, Acct-Reset-Time, Acct-Server-N, Acct-Sess-Interval, Acct-Src-Port, Acct-Stop-Only, Acct-Timeout

Rad-Auth-Client

Description: A subprofile that enables you to define how the Stinger unit interacts as a client to RADIUS authentication servers.

Usage: With External-Auth as the working profile, list the Rad-Auth-Client subprofile. For example:

```
admin> list rad-auth-client
[in EXTERNAL-AUTH:rad-auth-client]
auth-server-1=0.0.0.0
auth-server-2=0.0.0.0
auth-server-3=0.0.0.0
auth-port=0
```

```
auth-src-port=0
auth-key=""
auth-timeout=0
auth-rsp-required=no
auth-sess-interval=0
auth-ts-secure=yes
auth-reset-time=0
auth-Send67=yes
auth-frm-adr-start=no
auth-id-fail-return-busy=no
auth-id-timeout-return-busy=no
auth-radius-compat=old-ascend
auth-keep-user-name=change-name
auth-realm-delimiters="@/\%"
id-auth-prefix=""
allow-auth-config-rqsts=yes
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: External-Auth

See Also: Allow-Auth-Config-Rqsts, Auth-Frm-Adr-Start, Auth-ID-Timeout-Return-Busy, Auth-ID-Timeout-Return-Busy, Auth-Keep-User-Name, Auth-Key, Auth-Port, Auth-RADIUS-Compat, Auth-Realm-Delimiters, Auth-Reset-Time, Auth-Rsp-Required, Auth-Server-N, Auth-Sess-Interval, Auth-Src-Port, Auth-Timeout, Auth-TS-Secure, ID-Auth-Prefix

Rad-ID-Source-Unique

Description: Specifies whether each RADIUS accounting request should be identified by the user datagram protocol (UDP) source port value, as well as by RADIUS ID, in order to extend the available number of unique IDs for accounting requests.

RADIUS uses ID values in Request-Response matching. For each unique accounting request (including retries, if a response is not received within the configured timeout period), RADIUS assigns an 8-bit ID value. The assigned value is freed when the request is no longer pending—that is, when RADIUS matches a request with a response, or the request times out.

When the Stinger unit runs at high capacity, RADIUS can run out of unique IDs. By default, when the server reaches its limit of 256 outstanding requests, no unique values are available for the next accounting request. To overcome this limitation, you can specify that each request be identified by the UDP source port as well as by the RADIUS ID value.

Usage: Valid values are as follows:

- `system-unique`—Specifies that the Stinger unit uses only the RADIUS ID in Request-Response matching. This is the default.

- `port-unique`—Specifies that the Stinger unit uses the source UDP port number as well as the RADIUS ID in Request-Response matching.

Example: set rad-id-source-unique = port-unique

Location: External-Auth

See Also: Acct-Type, Auth-Type, Local-Profiles-First, Rad-Acct-Client, Rad-Auth-Client, Rad-ID-Space

Rad-ID-Space

Description: Specifies whether the Stinger unit uses a single sequence space for the RADIUS ID number. RADIUS uses an ID value to aid in Request-Response matching. By default, the Stinger unit uses a single sequence space for the RADIUS ID number in all RADIUS messages, which limits the number of IDs available for assignment to 256. A combined total of 256 authentication and accounting packets are sent before the ID sequence rolls over. However, by setting Rad-ID-Space to Distinct, you can configure distinct ID sequence spaces for RADIUS accounting and authentication packets.

Usage: Specify one of the following values:

- Unified (the default) specifies that the Stinger unit uses a single sequence space for the RADIUS ID number.

- Distinct specifies that RADIUS authentication and accounting packets do not share the same ID sequence space. The Stinger unit can send a total of 256 authentication packets before the authentication ID sequence rolls over, and 256 accounting packets before the accounting ID sequence rolls over. Three sequence spaces are allocated: one for the Unified sequence space, one for the authentication ID sequence, and one for the accounting ID sequence.

Example: set rad-id-space = distinct

Dependencies: When you configure the Stinger unit to use distinct ID sequence spaces, the RADIUS server must perform additional checks for duplicate detection. The server should check the RADIUS ID value and the service type and destination UDP port in each packet.

Location: External-Auth

See Also: Acct-Type, Auth-Type, Local-Profiles-First, Rad-Acct-Client, Rad-Auth-Client

RADIUS-Change-Enabled

Description: Specifies whether the system generates a trap when a new RADIUS server is being accessed. This trap returns the objectID and IP address of the new server.

Usage: Valid values are as follows:

- Yes—Specifies that the system generates a trap when a new RADIUS server is being accessed. This is the default.

- No—Specifies that the system does not generate a trap when a new RADIUS server is being accessed.

Example: set radius-change-enabled = no

Location: Trap *host-name*

See Also: Event-Overwrite-Enabled

RA-Downshift-Int-Down

Description: *Not currently used.* Specifies the number of seconds that the downshift noise margin can be maintained before the line reduces its downstream bit rate.

Usage: When this paramater becomes available you will be able to specify a value from 1 to 255.

Example: `set ra-downshift-int-down=15`

Location: AL-DMT {shelf-*N* slot-*N N*} > Margin-Config

See Also: RA-Downshift-Int-Up

RA-Downshift-Int-Up

Description: *Not currently used.* Specifies the number of seconds that the downshift noise margin can be maintained before the line reduces its upstream bit rate.

Usage: When this paramater becomes available you will be able to specify a value from 1 to 255.

Example: `set ra-downshift-int-up = 15`

Location: AL-DMT {shelf-*N* slot-*N N*} > Margin-Config

See Also: RARP-Enabled

RA-Downshift-Margin-Down

Description: *Not currently used.* Specifies the downstream noise margin relative to zero decibels (dB). If the noise level remains at this level for more than the specified time interval, the line reduces its downstream bit rate.

Usage: When this paramater becomes available you will be able to specify a value from 1 to 31 dB.

Example: `set ra-downshift-margin-down = 15`

Location: AL-DMT {shelf-*N* slot-*N N*} > Margin-Config

See Also: RA-Downshift-Margin-Up

RA-Downshift-Margin-Up

Description: *Not currently used.* Specifies the upstream noise margin relative to 0 dB. If the noise level remains at this level for more than the specified time interval, the line reduces its upstream bit rate.

Usage: When this paramater becomes available you will be able to specify a value from 1 to 31 dB.

Example: `ra-downshift-margin-up = 15`

Location: AL-DMT {shelf-*N* slot-*N N*} > Margin-Config

See Also: RA-Downshift-Margin-Down

Rad-Serv-Enable

Description: Specifies whether or not the on-board RADIUS server is enabled.

Usage: Valid values are as follows:

- `Yes`—Specifies that the RADIUS server is enabled.
- `No`—Specifies that the RADIUS server. This is the default.

Example: `set rad-serv-enable = yes`

Location: External-Auth

See Also: Acct-Type, Auth-Type, Local-Profiles-First, Rad-Acct-Client, Rad-Auth-Client, Rad-ID-Space

RARP-Enabled

Description: Enables/disables the Stinger unit's ability to use the Reverse Address Resolution Protocol (RARP) to obtain its IP address from a RARP server.

Usage: Valid values are as follows:.

- `Yes`—Specifies that the Stinger unit uses RARP to obtain its IP address from a RARP server.
- `No`—Specifies that the unit's ability to use RARP is disabled. This is the default.

Example: `set rarp-enabled = yes`

Location: IP-Global

See Also: Proxy-Mode

Rate-Adapt-Mode-Down

Description: Specifies the rate-adaptive mode for downstream training.

Usage: Specify one of the following values:

- `automatic-at-startup`—specifies that the downstream rate is selected at startup. If you accept the Automatic-At-Startup default, the Customer Premises Equipment (CPE) initializes at a minimum specified bit rate and target noise margin.
  If the CPE fails to achieve the minimum bit rate in either direction, it cannot initialize, and it sends a message that the requested bit rate was too high. If the CPE can support a higher bit rate than the specified minimum, it can train up to a higher rate within the acceptable noise margin. Each direction can specify a different minimum and maximum bit rate for using the fast or interleaved ADSL channel. This is the default.
- `operator-controlled`—specifies that the line trains downstream using a constant planned bit rate. The Customer Premises Equipment (CPE) must initialize at and maintain a specific bit rate with an acceptable target noise margin.

If the CPE fails to achieve the planned bit rate in either direction, it fails to initialize. The CPE does not use a higher bit rate, even if it can support one.

• The `dynamic` setting is not currently used.

Location: AL-DMT {shelf-*N* slot-*N N*} > Line-Config

See Also: Rate-Adapt-Mode-Up

Rate-Adapt-Mode-Up

Description: Specifies the rate-adaptive mode for upstream training.

Usage: Specify one of the following values:

• `automatic-at-startup`—Specifies that the upstream rate is selected at startup. If you accept the Automatic-At-Startup default, the Customer Premises Equipment (CPE) initializes at a minimum specified bit rate and target noise margin.

  If the CPE fails to achieve the minimum bit rate in either direction, it cannot initialize, and sends a message that the requested bit rate was too high. If the CPE can support a higher bit rate than the specified minimum, it can train up to a higher rate within the acceptable noise margin. Each direction can specify a different minimum and maximum bit rate for using the fast or interleaved ADSL channel. This is the default.

• `operator-controlled`—Specifies that the line trains upstream using a constant planned bit rate. The Customer Premises Equipment (CPE) must initialize at and maintain a specific bit rate with an acceptable target noise margin.

  If the CPE fails to achieve the planned bit rate in either direction, it fails to initialize. The CPE does not use a higher bit rate, even if it can support one.

• The `dynamic` setting is not currently used.

Location: AL-DMT {shelf-*N* slot-*N N*} > Line-Config

See Also: Rate-Adapt-Mode-Down

Rate-Adapt-Ratio-Down

Description: *Not currently used.* Specifies the ratio for distributing excess downstream bit rate among the fast and interleaved channels when dual latency is supported.

Usage: When this parameter becomes available, you will be able to specify a percentage.

Example: `rate-adapt-ratio-down = 100`

Dependencies: Valid only when `rate-adapt-mode = automatic_at_startup` or `dynamic`.

Location: AL-DMT { any-shelf any-slot *N*} > Line-Config

Rate-Adapt-Ratio-Up

Description: *Not currently used.* Specifies the ratio for distributing excess upstream bit rate among the fast and interleaved channels when dual latency is supported.

Usage: When this parameter becomes available, you will be able to specify a percentage.

Example: rate-adapt-ratio-up = 100

Dependencies: Valid only when rate-adapt-mode = automatic_at_startup or dynamic.

Location: AL-DMT { any-shelf any-slot *N*} > Line-Config

Ratio-Centralized-Detection

Description: Specifies the ratio of problem detection between the primary control module and all other modules when centralized detection is enabled.

Usage: Values can be from 0 to 65535. For example, if the ratio is 5, then the primary control module performs five self-tests before triggering centralized line interface module (LIM) tests. The default is 5.

Example: ratio-centralized-detection = 5

Location: System-Integrity

See Also: Encapsulation-Protocol, Enable-Continuous-Detection

RA-Upshift-Int-Down

Description: *Not currently used.* Specifies the number of seconds that the upshift noise margin can be maintained before the line increases its downstream bit rate.

Usage: When this parameter becomes available, you will be able to specify a value from 1 to 255.

Example: set ra-upshift-int-down = 15

Location: AL-DMT {shelf-*N* slot-*N N*} > Margin-Config

See Also: RA-Upshift-Int-Up

RA-Upshift-Int-Up

Description: *Not currently used.* Specifies the number of seconds that the upshift noise margin can be maintained before the line increases its upstream bit rate.

Usage: When this parameter becomes available, you will be able to specify a value from 1 to 255.

Example: set ra-upshift-int-up = 15

Location: AL-DMT {shelf-*N* slot-*N N*} > Margin-Config

See Also: RA-Upshift-Int-Down

RA-Upshift-Margin-Down

Description: *Not currently used.* Specifies the downstream noise margin relative to zero decibels (dB). If the noise level remains at this level for more than the specified time interval, the line increases its downstream bit rate.

Usage: When this parameter becomes available, you will be able to specify a value from 1 to 31 dB.

Example: `set ra-upshift-margin-down = 15`

Location: AL-DMT {shelf-*N* slot-*N N*} > Margin-Config

See Also: RA-Upshift-Margin-Up

RA-Upshift-Margin-Up

Description: *Not currently used.* Specifies the upstream noise margin relative to 0 dB. If the noise level remains at this level for more than the specified time interval, the line increases its upstream bit rate.

Usage: When this parameter becomes available, you will be able to specify a values from 1 to 31 dB.

Example: `set ra-upshift-margin-up = 15`

Location: AL-DMT {shelf-*N* slot-*N N*} > Margin-Config

See Also: RA-Upshift-Margin-Down

Rcv-Tone-Frequency

Description: Reports the receive tone frequency in Herz during a copper loop test (CLT).

Usage: This is a read-only value.

Example: `rcv-tone-frequency = 0`

Location: CLT-Result

See Also: Rcv-Tone-Level

Rcv-Tone-Level

Description: Reports the receive tone level in hundredths (.01) dBm during a copper loop test (CLT).

Usage: This is a read-only value.

Example: `rcv-tone-level = 0`

Location: CLT-Result

See Also: Rcv-Tone-Frequency

Read-Access-Hosts

Description: Specifies an array containing up to five IP addresses of Simple Network Management Protocol (SNMP) managers that have Read permission. If Enforce-Address-Security=Yes, the Stinger unit responds to SNMP Get and Get-Next commands from only the SNMP managers you specify in the array.

Usage: Each element in the array can specify an IP address. When SNMP is the working profile, you can use the List command to display the array elements. For example:

```
admin> list read-access-hosts
[in SNMP:read-access-hosts]
read-access-hosts[1]=0.0.0.0
read-access-hosts[2]=0.0.0.0
read-access-hosts[3]=0.0.0.0
read-access-hosts[4]=0.0.0.0
read-access-hosts[5]=0.0.0.0
```

You can then set a value for Read-Access-Hosts by specifying the numeric index of one of the array elements and the value for that element. For example:

```
admin> set 1 10.2.3.4/24
```

Or, you can set an array element without listing the array. For example:

```
admin> set read-access-hosts 1 10.2.3.4/24
```

Dependencies: You must set Enforce-Address-Security to Yes for Read-Access-Hosts to have any effect.

Location: SNMP

See Also: Enforce-Address-Security, Read-Community, Read-Write-Access, Write-Access-Hosts

Read-Community

Description: Specifies a Simple Network Management Protocol (SNMP) community name. An SNMP manager must send the correct community name to access the SNMP Get and Get-Next commands.

Usage: Specify the community name. You can enter up to 32 characters. The default is `public`.

Example: set read-community = mycomm

Location: SNMP

See Also: Enforce-Address-Security, Read-Access-Hosts, Read-Write-Access, Write-Access-Hosts

Read-Write-Access

Description: Enables/disables read-write access to the unit's MIBs for this user.

Usage: With the default value `no`, the user has read access only, which enables viewing but not modification of the MIBs. Specify `yes` or `no`

- `Yes`—Enables read/write access.

- `No`—Enables read access only.

Example: `read-write-access = no`

Location: SNMPv3-USM-User

See Also: Enforce-Address-Security, Read-Access-Hosts, Read-Community, Write-Access-Hosts

Read-Write-Community

Description: Specifies a read/write Simple Network Management Protocol (SNMP) community name. An SNMP manager must send the correct community name to access the SNMP Get, Get-Next, and Set commands.

Usage: Specify the community name. You can enter up to 32 characters. The default is `write`.

Example: `set read-write-community = secret`

Location: SNMP

See Also: Enforce-Address-Security, Read-Access-Hosts, Read-Community, Write-Access-Hosts

Read-Write-Enabled

Description: Specifies whether the read/write community can be accessed by means of SNMP.

Usage: Valid values are as follows:

- `Yes`—Specifies that the read/write community can be accessed by means of SNMP.

- `No`—Specifies the read/write community cannot be accessed by means of SNMP. This is the default.

Example: `set read-write-enabled = yes`

Location: SNMP

See Also: Read-Write-Access

Real-Time-VBR

Description: Enables/disables variable bit rate real-time (VBR-RT) traffic in this queue.

Usage: Valid values are as follows:

- `Yes`—This queue supports ATM real-time variable bit rate (VBR-RT) traffic.

- `No`—The queue does not support variable bit rate real time traffic.This is the default.

For each queue, one or more ATM services categories can be set to `yes`. The Real-Time-Vbr parameter must be set to `yes` for at least one and no more than two of the active queues assigned to a LIM, control module, or trunk.

Location: Controller-Static-Config > Atm-Parameters > Outgoing-Queue

See Also: CBR, UBR

Receive-Auth-Mode

Description: Specifies the authentication protocol to use for incoming Point-to-Point Protocol(PPP), Multilink Protocol (MP), and Multilink Protocol Plus (MP+) calls.

Usage: Usage: Specify one of the following settings:

Setting	Description
`No-PPP-Auth` (the default)	No authentication is required.
`PAP-PPP-Auth`	The connection must use Password Authentication Protocol
`(PAP)`	The remote end sends its password in the clear. The password is not encrypted.
`CHAP-PPP-Auth`	The connection must use Challenge Handshake Authentication Protocol (CHAP). The remote end does not send its password in the clear. An MD5 digest calculated from the password and a random challenge are sent instead. Any-PPP-Auth The connection must use PAP, CHAP or MS-CHAP (Microsoft's extension of CHAP)
`DES-PAP-PPP-Auth`	The connection must use PAP with dynamic passwords.
`Token-PAP-PPP-Auth`	The connection must use PAP with dynamic passwords. When you specify this setting, the system uses one-time Data Encryption Standard (DES) password encryption and sends a challenge in the token.
`Token-CHAP-PPP-Auth`	The connection must use PAP-Token for the first call of a multichannel session, and CHAP for additional channels.
`Cache-Token-PPP-Auth`	The connection must use CHAP with dynamic passwords. The system uses CHAP with challenges, but caches token responses and uses them for authenticating additional channels.
`MS-CHAP-PPP-Auth`	The connection must use MS-CHAP, designed mostly for Windows NT or LAN Manager platforms.

Example: `set receive-auth-mode = both-ppp-auth`

Dependencies: Consider the following:

- When Calling-Line ID (CLID) authentication is in use, the Receive-Auth-Mode value is superseded by the Send-Auth-Mode setting in the local Connection profile.

- You must specify a password for each PPP call if Receive-Auth-Mode is set to any value other than No-PPP-Auth.

Location: Answer-Defaults > PPP-Answer

See Also: Recv-Password, Send-Password

Received-Rs-Blocks

Description: Indicates the number of received Reed-Solomon blocks. Enabled on 24-port and 48-port LIMs only.

Usage: The Received-Rs-Blocks parameter is a read-only display for checking operations.

Example: `received-rs-blcks = 104073`

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Incoming-Cells, Transmitted-Rs-Blocks

Rec-Link-Cond-Time

Description: *Not currently used.* Specifies amount of time before Link conditioning timeout during link recovery,

Usage: When this parameter becomes available, you will be able to specify a number from zero to 2147483647.

Example: `set rec-link-cond-time = 10`

Location: DS1-ATM { shelf-*N* slot-*N N*} > Line-Config > Ima-Option-Config > Rxlink-Config

See Also: Add-Link-Cond-Time, Fault-Clearing-Time, Fault-Clearing-Type

Recv-Password

Description: *Not currently used.* Password received from the far end.

Usage: When this parameter becomes available, you will be able to specify a a passsword for MPP and PPP PAP and CHAP security.

Example: `recv-password = xiiixo`

Location: Connection > PPP-Options

See Also: Bi-Directional-Auth, Substitute-Recv-Name

Redundancy (profile)

Description: A profile containing configuration settings for redundant control modules (CMs).

Usage: Use the Read and List commands to make Redundancy the working profile and list its contents. For example:

```
admin> read redundancy
REDUNDANCY read

admin> list
[in REDUNDANCY]
context=[ { initial no-function no-mandate no-function +
system-ip-addr=0.0.0.0
first-controller-default-route={ "" 0.0.0.0/0 0.0.0.0 8 60 no +
second-controller-default-route={ "" 0.0.0.0/0 0.0.0.0 8 60 +
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
REDUNDANCY written
```

See Also: Context, System-IP-Addr

Reelect-Time

Description: Specifies the number of seconds that the node waits after losing connectivity to the current peer group leader before restarting the process of electing a new peer group leader.

Usage: Specify the number of seconds to wait.

Example: set reelect-time = 15

Location: PNNI-Node-Config *N* > Node-Pgl

See Also: Init-Time, Leadership-Priority, Override-Delay, Parent-Node-Index

Regional

Description: *Not currently used.* Specifies a regional number from 0 to 104 representing the highest level of the PNNI hierarchy that lies within the regional scope. The default value is 32.

Relative-Delay

Description: Indicates the latest measured delay on this link relative to the link, in the same inverse multiplexing ATM (IMA) group, with the least delay.

Usage: Valid range for this read-only value is from zero to 2147483647.

Example: relative-delay = 0

Location: DS1-ATM-Stat >{ shelf-*N* slot-*N N*} > Ima-Link-Status

See Also: Far-End-Rx-Failure-Status, Far-End-Rx-Link-State, Far-End-Tx-Link-State, Invalid-Intervals, Near-End-Rx-Failure-Status, Near-End-Rx-Link-State, Near-End-Tx-Link-State

Remote-Address

Description: Specifies the internet protocol IP address of the calling device. The Stinger unit uses the value you specify to match the address presented by an incoming IP connection.

Usage: Specify an IP address in dotted decimal notation. Separate the optional subnet mask from the address by entering a forward slash. The default is 0.0.0.0/0. If the address does not include a subnet mask, the router assumes the default subnet mask for the address class.

Example: set remote-address = 10.77.156.4/24

Location: Connection *station* > IP-Options

See Also: IP-Options, Local-Address

Remote-Configuration

Description: Specifies whether a RADIUS server remotely configures a login banner and a list of Telnet hosts.

Usage: Valid values are as follows:

- Yes—Specifies that the Stinger unit retrieves the login banner and list of Telnet hosts from RADIUS.
- No—Specifies that you must specify the banner and list of Telnet hosts in a local Terminal-Server profile. This is the default.

Example: set remote-configuration = no

Dependencies: If terminal services are disabled or RADIUS is not in use, Remote-Configuration does not apply.

Location: Terminal-Server > Menu-Mode-Options

See Also: Banner, Host-N, Menu-Mode-Options, Text-N (N=1–4)

Repeat-Ustat

Description: Enables/disables sending two USTAT messages each time a USTAT message is required.

Usage: This parameter is disabled by default.

Example: repeat-ustat = no

Location: Atm-If-Sig-Params *N* > Qsaal-Options

See Also: Max-Cc, Max-Pd, Max-Stat, Tkeepalive-Ms,Tcc-Ms, Tpoll-Ms

Reqd-State

Description: Specifies the required operational state of a slot or device. Changing the value of Reqd-State initiates a state change. The state change is complete when the Reqd-State value is equal to the Device-State or Current-State value.

Usage: In a Device-State profile, specify one of the following values for this parameter:

- `down-reqd-state`—Requires the device to be in a nonoperational state.
- `up-reqd-state`—Requires the device to be in normal operations mode.

In a Slot-State profile, specify one of the following values:

- `reqd-state-down`—Requires the slot to be in a nonoperational state.
- `reqd-state-up`—Requires the slot to be in normal operations mode.

Example: `set reqd-state = down-req-state`

Dependencies: You can also set Reqd-State by using the Device or Slot command. If you set `Reqd-State=Down-Reqd-State` in a Slot-State profile, the setting does not persist across system resets.

Location: Device-State {{shelf-*N* slot-*N N*} *N*}, Slot-State {shelf-*N* slot-*N N*}

See Also: Current-State

Retry-Time

Description: *Not currently used.* Specifies the number of seconds the node waits before attempting to reestablish a switched virtual channel connection (SVCC) where that RCC appears to be still necessary and viable but that has unexpectedly terminated.

RIP

Description: Specifies whether the link should run Routing Information Protocol (RIP) v1 or RIP v2, and whether it should send updates, receive them, or both.

Note: The internet engineering task force (IETF) has voted to move RIP-v1 into the *historic* category, and its use is no longer recommended. You should upgrade all routers and hosts to RIP-v2. If you must maintain RIP-v1, Lucent Technologies recommends that you create a separate subnet, and place all RIP-v1 routers and hosts on that subnet.

Usage: Specify one of the following values:

Option	Specifies that the Stinger unit
Routing-Off (the default)	Does not send routing updates, and ignores any routing updates it receives for the connection.
Routing-Send-Only	Sends RIP-v1 routing updates, but ignores any it receives for the connection.
Routing-Recv-Only	Does not send RIP-v1 routing updates, but accepts any routing updates it receives for the connection.
Routing-Send-And-Recv	Both sends RIP-v1 routing updates and accepts any it receives for the connection.
Routing-Send-Only-V2	Sends RIP-v2 routing updates, but ignores any it receives for the connection.
Routing-Recv-Only-V2	Does not send RIP-v2 routing updates, but accepts any routing updates it receives for the connection.
Routing-Send-And-Recv-V2	Both sends RIP-v2 routing updates and accepts any it receives for the connection.

Example: set rip = routing-send-only-v2

Dependencies: If the Stinger unit does not route IP for the connection, or if IP routing is globally disabled, RIP does not apply.

Location: Connection *station* > IP-Options

See Also: IP-Options, RIP, RIP-Mode, RIP-Policy, RIP-Pref, RIP-Tag, Summarize-RIP-Routes

RIP2-Use-Multicast

Description: Enables or disables the default Routing Information Protocol version 2 (RIP-v2) behavior of using the multicast address (224.0.0.9) to send and receive updates.

Usage: Valid values are as follows:

- Yes—Specifies that RIP-v2 uses the multicast address (224.0.0.9) instead of the broadcast address for its updates. This is the default.
- No—Specifies that the use of the multicast address for RIP updates is disabled. The updates revert to the use of the broadcast address. Use this setting if you must use the broadcast address for backward compatibility with other systems.

Example: set rip2-use-multicast = no

Dependencies: The RIP2-Use-Multicast setting does not apply to RIP-v1.

Location: IP-Interface

See Also: RIP, RIP-Mode, RIP-Policy, RIP-Pref, RIP-Tag, Summarize-RIP-Routes

RIP-Mode

Description: Specifies whether the interface should run Routing Information Protocol (RIP) version 1 or RIP version 2, and whether it should send updates, receive them, or both.

The Internet Engineering Task Force (IETF) has voted to move RIP-v1 into the *historic* category, and its use is no longer recommended. You should upgrade all routers and hosts to RIP-v2. If you must maintain RIP-v1, Lucent Technologies recommends that you create a separate subnet, and place all RIP-v1 routers and hosts on that subnet.

Usage: Specify one of the following values:

Value	Specifies that the Stinger unit
Routing-Off (the default)	Does not send routing updates, and ignores any routing updates it receives for the connection.
Routing-Send-Only	Sends RIP-v1 routing updates, but ignores any it receives for the connection.
Routing-Recv-Only	Does not send RIP-v1 routing updates, but accepts any routing updates it receives for the connection.
Routing-Send-And-Recv	Sends RIP-v1 routing updates and accepts any it receives for the connection.
Routing-Send-Only-V2	Sends RIP-v2 routing updates, but ignores any it receives for the connection.
Routing-Recv-Only-V2	Does not send RIP-v2 routing updates, but accepts any routing updates it receives for the connection.
Routing-Send-And-Recv-V2	Sends RIP-v2 routing updates and accepts any it receives for the connection.

Example: `set rip-mode = routing-send-only-v2`

Location: IP-Interface {{shelf-*N* slot-*N N*} *N*}

See Also: RIP, RIP-Policy, RIP-Pref, RIP-Tag, Summarize-RIP-Routes

RIP-Policy

Description: Specifies whether the Stinger unit propagates routes back to the subnet from which they were received. If the router is running Routing Information Protocol (RIP), the RIP-Policy setting must specify a policy for outgoing update packets that include routes received on the same interface as the one that sent the update.

Usage: Valid values are as follows:

- `poison-rvrs`—specifies that the Stinger unit propagates routes back to the subnet from which they were received, but with a metric of 16 (infinite metric). This is the default.

- `split-horzn`—specifies that the Stinger unit does not propagate routes back to the subnet from which they were received.

Example: `set rip-policy = split-horzn`

Location: IP-Global

See Also: RIP, RIP-Policy, RIP-Pref, RIP-Tag, Summarize-RIP-Routes

RIP-Pref

Description: Specifies the default preference for routes the Stinger unit learns from Routing Information Protocol (RIP). When choosing the routes to put in the routing table, the router first compares their preference values, preferring the lowest number. If the preference values are equal, the unit compares the metric values, and uses the route with the lowest metric.

Usage: Specify a number from 0 to 255. A value of 255 prevents the use of the route. Following are the default preferences for different types of routes:

- 0 (zero)—Connected routes
- 30—Routes learned from ICMP redirects
- 100—Routes learned from RIP
- 100—Static routes

Example: `set rip-pref = 50`

Location: IP-Global

See Also: Down-Preference, Preference, Static-Pref

RIP-Queue-Depth

Description: Specifies the queue depth for Routing Information Protocol (RIP) packets.

Usage: Specify a number from 0 to 1024. The default is 0 (zero), which specifies that the Stinger unit does not drop the packets, no matter what the state of the routing subsystem or system memory.

Example: `set rip-queue-depth = 128`

Location: IP-Global

See Also: Queue-Depth

RIP-Tag

Description: Specifies a tag to associate with RIP routes. A tag is a 32-bit hexadecimal number.

Usage: Specify a 32-bit hexadecimal number. The default is c8:00:00:00.

Example: `rip-tag = cf000000`

Location: IP-Global

RIP-Trigger

Description: Specifies whether the IP router or Virtual Router (VRouter) tags routes that have been updated in the routing table and sends updates that include only the changed routes.

Usage: Valid values are as follows: Yes—S No—S

- Yes—Specifies that the router tags changes to its routing table and includes only the tagged routes in its next update. Changes occur when a call arrives or disconnects, RIP or Open Shortest Path First (OSPF) learns a route from another router, or the administrator modifies a route-related profile. The router broadcasts updates 5 to 8 seconds after the first change in the routing table is detected. The delay helps to prevent constant updates during peak traffic conditions. The result is reduced processing overhead in the router as well as its neighbors. This is the default.

- No—Specifies that the router sends full table updates every 20 to 40 seconds. The full table update is no longer broadcasted at fixed 30-second intervals, to prevent RIP routers on a network from synchronizing and sending large updates in unison.

Example: `set rip-trigger = no.Profile and Parameter Reference`

Location: IP-Global, VRouter

See Also: RIP, RIP-Policy, RIP-Pref, RIP-Tag, Summarize-RIP-Routes

Rlogin

Description: Enables or disables the use of the Rlogin command from the terminal-server interface.

Usage: Valid values are as follows:

- Yes—Enables the use of the Rlogin command.

- No—Disables the use of the Rlogin command. This is the default. If Rlogin is set to No and a user attempts to initiate an Rlogin session in the terminal-server interface, the following message appears:

  `rlogin: not enabled.`

Example: `rlogin = yes`

Dependencies: If terminal services are disabled, Rlogin does not apply.

Location: Terminal-Server > Terminal-Mode-Configuration > Rlogin-Options

See Also: Max-Source-Port, Min-Source-Port

Rlogin-Options

Description: A subprofile containing options for configuring Rlogin connections.

Usage: With Terminal-Mode-Configuration subprofile as the working profile, list the Rlogin-Options subprofile. For example:

```
admin> list rlogin-options
[in TERMINAL-SERVER:terminal-mode-configuration:rlogin-options]
rlogin=no
```

```
max-source-port=1023
min-source-port=128
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile, enter the List command and append two periods.

```
admin> list ..
```

Location: Terminal-Server > Terminal-Mode-Configuration

See Also: Max-Source-Port, Min-Source-Port

RLOP-BIP-Error-Count

Description: Indicates the number of Receive Line Overhead Processor (RLOP) Bit Interleaved Parity (BIP-8) errors. The RLOP is responsible for line-level alarms and performance monitoring.

Usage: The RLOP-BIP-Error-Count value is read only.

Example: `RLOP-BIP-Error-Count = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: RPOP-BIP-Error-Count, RSOP-BIP-Error-Count

RLOP-FEBE-Error-Count

Description: Indicates the number of Receive Line Overhead Processor (RLOP) Far End Block Errors (FEBEs).

Usage: The RLOP-FEBE-Error-Count value is read only.

Example: `RLOP-FEBE-Error-Count = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: RPOP-FEBE-Error-Count

Route-Filter (subprofile)

Description: A subprofile containing a route-filter specification.

Usage: With a Filter profile as the working profile, list the Route-Filter subprofile. You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile, enter the List command, followed by a space and two periods.

Example: To list the contents of the Route-Filter subprofile:

```
admin> list input-filters 1 route-filter
[in FILTER/test:input-filters[1]:route-filter]
source-address-mask = 255.255.255.192
source-address = 200.100.50.128
```

```
route-mask = 0.0.0.0
route-address = 0.0.0.0
add-metric = 0
action = none
```

To return to a higher context in the working profile:

```
admin> list ..
```

Location: Filter filter-name > Input-Filters, Filter filter-name > Output-Filters

See Also: Action, Add-Persistence, Route-Filter (subprofile), Type

Route-Port

Description: *Not currently used.*

Router-Id

Description: Specifies the router IP address.

Usage: Specify the IP address including the netmask field if applicable.

Example: set router-id = 192.207.23.13

Location: IP-Global

See Also: Ignore-ICMP-Redirects, Selectools-Enabled

Route-Tns-Id

Description: Specifies the value of the transit network identifier.

Usage: Specify a string to identify the transit network.

Example: set route-tns-id = mixxx0

Location: PNNI-Route-Tns { *N* other other "" *N* } > Tns-Index

See Also: Node-Index, Route-Tns-Index, Route-Tns-Plan, Route-Tns-Type

Route-Tns-Index

Description: Specifies an index that distinguishes between multiple listings of connectivity to a given transit network from the local node.

Usage: Only the number 1 is currently supported.

Example: set route-tns-index = 1

Location: PNNI-Route-Tns { *N* other other "" *N* } > Tns-Index

See Also: Node-Index, Route-Tns-Plan, Route-Tns-Type

Route-Tns-Plan

Description: Specifies a network identification plan according to which network identification has been assigned.

Usage: Valid values are as follows:

- `carrier-ident-code`
- `other`—This is the default.

Example: route-tns-plan = other

Location: PNNI-Route-Tns { *N* other other "" *N* } > Tns-Index

See Also: Node-Index, Route-Tns-Index, Route-Tns-Type

Route-Tns-Type

Description: Specifies the type of network identification used for this transit network.

Usage: Valid values are

- `other` —Unspecified
- `reject` —A route that discards traffic
- `internal`—Directly attached to the logical node advertising the address
- `exterior` —Reachable through the PNNI routing domain, but not located in the PNNI routing domain. This is the default.

Example: set route-tns-type = other

Location: PNNI-Route-Tns { *N* other other "" *N* } > Tns-Index

See Also: Node-Index, Route-Tns-Index, Route-Tns-Plan

Routing-Metric

Description: Assigns a Routing Information Protocol (RIP)-style metric to a route.

Usage: Specify an integer from 1 to 15. The default is 7.

Example: set routing-metric = 1

Location: Answer-Defaults > IP-Answer, Connection *station* > IP-Options

See Also: Private-Route, RIP

RPOP-BIP-Error-Count

Description: Indicates the number of Receive Path Overhead Processor (RPOP) Bit Interleaved Parity 8 (BIP-8) errors. The RPOP interprets pointers and extracts path overhead and the synchronous payload envelope. It is also responsible for path-level alarms and for monitoring performance.

Usage: The RPOP-BIP-Error-Count value is read only.

Example: `RPOP-BIP-Error-Count = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: RLOP-BIP-Error-Count,RSOP-BIP-Error-Count

RPOP-FEBE-Error-Count

Description: Indicates the number of Receive Path Overhead Processor (RPOP) Far End Block Errors (FEBEs).

Usage: The RPOP-FEBE-Error-Count value is read only.

Example: `RPOP-FEBE-Error-Count = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: RLOP-FEBE-Error-Count

RSOP-BIP-Error-Count

Description: Indicates the number of Receive Section Overhead Processor (RSOP) Bit Interleaved Parity 8 (BIP-8) errors. The RSOP synchronizes and descrambles frames, and provides section-level alarms and performance monitoring.

Usage: The RSOP-BIP-Error-Count value is read only.

Example: `RSOP-BIP-Error-Count = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: RLOP-BIP-Error-Count, RPOP-BIP-Error-Count

Running-Secs

Description: Indicates the number of seconds since this inverse multiplexing ATM (IMA) group has been in the operational state.

Usage: Valid range for this read-only parameter is from zero to 2147483647.

Example: `running-secs  =  53461`

Location: IMA-Group-Stat *name*

See Also: Far-End-Txclock-Mode, Last-Change-Time, Least-Delay-Link, Near-End-IMA-Group-State, Rx-Avail-Cellrate, Rx-IMA-Id, Rx-Num-Config-Links

Rx-Avail-Cellrate

Description: Indicates the current cell rate (truncated value in cells per second) provided by this inverse multiplexing ATM (IMA) group in the receive direction, considering all the receive links in the Active state.

Usage: Valid range for this read-only parameter is from zero to 2147483647.

Example: `rx-avail-cellrate  =   0`

Location: IMA-GROUP-stat *name*

See Also: Diff-Delay-Max-Obs, Last-Change-Time,Least-Delay-Link, Running-Secs, Rx-Timing-Ref-Link, Tx-Avail-Cellrate, Tx-Timing-Ref-Link

Rx-Cell-Payload-Descramble-Disabled

Description: Enables or disables descrambling of the 48-byte Asynchronous Transfer Mode (ATM) cell payload in received cells.

Usage: Specify Yes if the transmitting switch has disabled the corresponding scramble function. Otherwise specify No. The default is No.

- `Yes`—Disables descrambling of the 48-byte ATM cell payload in received cells.
- `No`—Enables descrambling of the 48-byte ATM cell payload in received cells.

Example: `set rx-cell-payload-descramble-disabled = yes`

Location: OC3-ATM {shelf-*N* trunk-module-*N N*} > Line Config

See Also: Rx-Descramble-Disabled, Tx-Cell-Payload-Scramble-Disabled

Rx-Data-Rate-Limit

Description: Specifies the maximum data rate (in kilobits per second) to be received across the connection. You can use this setting to limit bandwidth for a connection according to the rate charged for the account.

Usage: Specify a number from 0 to 64000. The default is 0 (zero), which disables the data-rate limit feature. If the value you specify is larger than the actual bandwidth provided by the line, the connection behaves as though the data rate limit were disabled, except that additional computations are performed unnecessarily.

Example: `set rx-data-rate-limit = 32000`

Dependencies: The system activates configurable receive data-rate limits only for connections that use SDSL 48-Port Line Interface Module and the unchannelized DS3-ATM Trunk Module. If you specify a value for a connection that does not use these modules, the system ignores the settings.

Location: Connection > Session-Options

See Also: Tx-Data-Rate-Limit

Rx-Descramble-Disabled

Description: Enables or disables descrambling of the entire Asynchronous Transfer Mode (ATM) receive stream.

Usage: Specify Yes if the transmitting switch has disabled the corresponding scramble function. Otherwise specify No. The default is No.

- `Yes`—Disables descrambling of the entire ATM receive stream.
- `No`—Enables descrambling of the entire ATM receive stream.

Example: Set RX-Descramble-Disabled = yes

Location: OC3-ATM {shelf-*N* trunk-module-*N N*} > Line Config

See Also: Tx-Cell-Payload-Scramble-Disabled, Tx-Scramble-Disabled

Rx-Frame-Length

Description: Indicates the value of inverse multiplexing ATM (IMA) frame length as received from remote IMA function.

Usage: Valid values for this read-only parameter are:

Option	Description
32	IMA frame is 32 cells long.
64	IMA frame is 64 cells long.
128	IMA frame is 128 cells long.
256	IMA frame is 256 cells long.

Example: `rx-frame-length = 128`

Location: IMA-Group-Stat *name*

See Also: Near-End-IMA-Group-State, Running-Secs, Rx-Avail-Cellrate

Rx-IMA-Id

Description: Indicates the inverse multiplexing ATM (IMA) ID currently in use by the near-end IMA function.

Usage: Valid range for this read-only parameter is from zero to 255.

Example: `rx-ima-id = 0`

Location: IMA-Group-Stat *name*

See Also: Far-End-IMA-Group-State, Far-End-Txclock-Mode, Last-Change-Time, Least-Delay-Link, Near-End-IMA-Group-State

Rx-Lid

Description: Indicates the receiving link identifier (Rx-Lid) of the link.

Usage: Valid range for this read-only parameter is from zero to 31.

Example: rx-lid = 0

Location: DS1-ATM-Stat {shelf-*N* slot-*N N*} > Ima-Link-Status

See Also: Far-End-Rx-Failure-Status, Far-End-Rx-Link-State, Far-End-Tx-Link-State, Invalid-Intervals, Near-End-Rx-Failure-Status

Rx-Lid-Learning-Time

Description: *Not currently used.* Specifies the maximum amount of time in milliseconds allowed for learning the receiving link ID (the Rx Lid value) in IMA Control Protocol (ICP) cells.

Usage: Valid range is from zero to 2147483647.

Example: set rx-lid-learning-time = 100

RxLink-Config

Description: A subprofile for configuration of the receiving link in an inverse multiplexing ATM (IMA) connection.

Usage: Use the Read and List commands to make DS1-ATM the current profile. Then list the Line-Config, Ima-Option-Config, and Rxlink-Config subprofiles in succession.

Example:

```
admin> list .. rxlink-c
[in DS1-ATM/{ any-shelf any-slot 0
}:line-config:ima-option-config:rxlink-confi+
add-link-cond-time = 3
link-recovery-type = fast
rec-link-cond-time = 10
rx-lid-learning-time = 100
fault-clearing-type = auto
fault-clearing-time = 10
in-defect-int-time = 2500
out-defect-int-time = 10000
defect-ratio = 10
```

Location: DS1-ATM *N* > Line-Config > Ima-Option-Config

See Also: Add-Link-Cond-Time, Fault-Clearing-Time, Fault-Clearing-Type, Link-Recovery-Type, Rx-Lid-Learning-Time

Rx-Min-Num-Links

Description: Specifies the minimum number of receiving links to be active in order for the inverse multiplexing ATM (IMA) group to remain in the operational state.

Usage: Specify a number from 1 and 8.

Example: `set rx-min-num-links = 1`

Location: IMAgroup *name*

See Also: Check-Far-End-IMA-Id, Expected-Far-End-IMA-Id, Group-Symmetry-Mode, Tx-Min-Num-Links

Rxmt-Interval

Description: Pertains to Private Network-to-Network Interface (PNNI). Specifies the number of seconds between retransmissions of unacknowledged Database summary packets, PPNI Topology State Element (PTSE) Request packets, and PPNI Topology State Packets (PTSPs) .

Usage: Specify the number of seconds.

Example: `set rxmt-interval  =  5`

Location: PNNI-Node-Config *N* > Node-Timer

See Also: Peer-Delayed-Ack-Interval, PTSE-Holddown,PTSE-Lifetime-Factor, PTSE-Refresh-Interval

Rx-Num-Active-Links

Description: Indicates the number of links that are configured to receive and are currently active in this inverse multiplexing ATM (IMA) group.

Usage: Valid range for this read-only parameter is from zero to 24.

Example: `set rx-num-active-links = 4`

Location: IMA-Group-Stat *name*

See Also: Least-Delay-Link, Near-End-IMA-Group-State, Rx-IMA-Id, Rx-Num-Config-Links, Tx-Num-Active-Links, Tx-Num-Config-Links

Rx-Num-Config-Links

Description: Indicates the number of links that are configured to receive in this inverse multiplexing ATM (IMA) group.

Usage: Valid range for this read-only parameter is from zero to 24.

Example: `rx-num-config-links = 2`

Dependencies: The value of this parameter is overwritten by the value of the Tx-Num-Active-Links parameter in the Ima-GroupStat profile when the IMA group is configured in the SymmetricalConfiguration group symmetry mode.

Location: IMA-Group-Stat *name*

See Also: Least-Delay-Link, Near-End-IMA-Group-State, Rx-IMA-Id,
Rx-Num-Config-Links, Tx-Num-Active-Links, Tx-Num-Config-Links

Rx-Oam-Label-Value

Description: Indicates the inverse multiplexing ATM (IMA) OAM Label value transmitted
by the far end (FE) IMA unit. A value of 0 likely means that the IMA unit has not received an
Administartion, Operations, and Maintenance (OAM) label from the FE IMA unit at this time.

Usage: Valid range for this read-only parameter is from zero to 255.

Example: `rx-oam-label-value = 3`

Location: IMA-Group-Stat *name*

See Also: Diff-Delay-Max-Obs, Failure-Status, Far-End-IMA-Group-State,
Far-End-Txclock-Mode, Tx-OAM-Label-Value

Rx-Signal-Present

Description: Indicates whether the line is receiving signal from the remote end or not.

Usage: Valid values for this read-only parameter are as follows:

- `Yes`—Indicates that the local node is receiving a signal from the remote customer
  premises equipment (CPE).
- `No`—Indicates that the local node is not receiving a signal from the remote.

Example: `rx-Signal-Present = yes`

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Statistic, HDSL2-Stat { shelf-*N*
slot-*N N* } > Physical-Statistic

See Also: Physical-Statistic

Rx-Stuffs-Counter

Description: Indicates the count of stuff events detected in the receive direction.

Usage: Valid range for this read-only parameter is from zero to 2147483647.

Example: `rx-stuffs-counter = 0`

Location: DS1-ATM-Stat { shelf-*N* slot-*N N*} > Ima-Link-Statistic

See Also: Elapsed-Seconds, Tx-Stuffs-Counter

Rx-Test-Pattern

Description: Indicates the test pattern received in the IMA control protocol (ICP) cell (octet 17) on the link during the inverse multiplexing ATM (IMA) test pattern procedure.

Usage: Valid range for this read-only parameter is from zero to 255.

Example: rx-test-pattern = 0

Location: DS1-ATM-Stat { shelf-*N* slot-*N N*} > Ima-Link-Status

See Also: Far-End-Rx-Link-State, Rx-Lid, Rx-Testproc-Status

Rx-Testproc-Status

Description: Indicates the current state of the test pattern procedure.

Usage: Valid values for this read-only parameter are

Option	Description
disabled	Test pattern procedure is currently disabled on this link.
operating	Test pattern procedure is currently operating on this link.
link-fail	Test pattern procedure has failed on this link.

Example: rx-testproc-status = disabled

Location: DS1-ATM-Stat { shelf-*N* slot-*N N*} > Ima-Link-Status

See Also: Far-End-Rx-Link-State, Rx-Lid, Rx-Testproc-Status

Rx-Timing-Ref-Link

Description: Indicates the index of the receive timing reference link. This index is used by the near end for inverse multiplexing ATM (IMA) data cell clock recovery. The Rx-Timing-Ref-Link is used to recover the clock from the physical layer and uses that recovered clock as a reference when it delivers cells to the higher layer, which is the ATM layer.

Usage: Specify a number from zero to 24. The distinguished value of zero may be used if no link has been configured in the IMA group, or if the receive timing reference link has not yet been detected.

Example: rx-timing-ref-link = 1

Location: IMA-Group-Stat *name*

See Also: Far-End-IMA-Group-State, Far-End-Txclock-Mode, Least-Delay-Link, Running-Secs, Rx-Num-Active-Links, Rx-Num-Config-Links, Tx-Num-Active-Links

S

Saal-Retry-Ms

Description: In Asynchronous Transfer Mode (ATM) specifies the number of milliseconds allowed to lapse before retrying ATM adaptation layer (AAL) establish messages.

Usage: Valid values are from 1000 to 5000.

Example: set saal-retry-ms = 10000

Location: ATM-IF-SIG-PARAMS *N* > Q2931-Options]

See Also: Max-Restart, Max-Statenq, T301-Ms

Save-Level

Description: Specify the lowest level of log messages the Stinger unit displays in the log status window. The unit logs all messages that are at the specified level or higher. For example, if Alert is specified, all messages at Alert, and Emergency level are logged.

Usage: Specify one of the following values:

Value	Lowest-level message indicates
None (the default)	The Stinger unit does not display log messages.
Emergency	The unit has an error condition and is unlikely to be operating normally.
Alert	The unit has an error condition but is still operating normally.
Critical	An interface has gone down or a security error has occurred.
Error	An error event has occurred.
Warning	An unusual event has occurred, but the unit is otherwise operating normally. For example, this type of message appears when a login attempt has failed because the user entered an incorrect user name or password.
Notice	Events of interest in normal operation have occurred (a link going up or down, for example).
Info	State and status changes that are commonly not of general interest have occurred.
Debug	Helpful debugging information.

Example: set save-level = error

Dependencies: Log levels are also configurable on a per-user basis in User profiles.

Location: Log

See Also: Facility, Host, Log-Display-Level, Save-Number, Syslog-Enabled

Save-Number

Description: Specifies the maximum number of log messages that the Stinger unit Unit saves for display in the status windows.

Usage: Specify an integer. The default is 100.

Example: `set save-number = 150`

Location: Log

See Also: Facility, Host, Log-Display-Level, Syslog-Enabled

See Also:

Scrambling-Enabled

Description: *Not currently used.* Specifies whether the payload of transmitted cells is scrambled or not.

Usage: When this parameter becomes available valid values will be:

- `Yes`—Enables the descrambling of received cells on the link. The payload of transmitted cells is scrambled.

- `No`— Disables the descrambling of received cells on the link. The payload of transmitted cells is not scrambled.

Example: set scrambling-enabled = yes

Location: DS1-ATM {shelf *N* slot *N N)* > Line-Config

See Also: Frame-Type

Screen-Length

Description: Specifies the number of lines displayed in the command-line window. (For the values to take effect, the user must log in again.)

Usage: Specify a number from 24 to 999. The default is 24 lines.

Example: `set screen-length = 68`

Location: User

See Also: Status-Length

Screen-Width

Description: Specifies the screen width for all command line interface sessions subsequent to the current session.

Usage: Specify a number from 80 (the default) to 255.

Example: set screen-width = 255

Location: USER *name*

See Also: Screen

SDSL

Description: Specifies the action to take when the code image for an SDSL 48-Port Line Interface Module is present in a tar file.

Usage: Valid values are as follows:

- `auto` —Causes the system to load images for cards that are installed in the Stinger unit, and to skip images for cards that are not installed. This is the default.
- `load`—Causes the system to load the image, even if there is no card of that type installed.
- `skip`—Causes the system to skip the image, even if there is a card of that type installed.

Example: sdsl = auto

Dependencies: A module is considered present in the system if a Slot-Type profile exists for that module type. The system creates a Slot-Type profile when it first detects the presence of a module, and does not delete the profile unless the administrator uses the Slot –r command to permanently remove a module that is no longer installed in the system, or clears NVRAM. To ensure that the system does not load unnecessary images, use Slot –r to remove Slot-Type profiles for modules that are no longer installed in the system.

Location: Load-Select

See Also: DS3-ATM, Enet2, Slot-Type, Slot-Type (profile), UDS3, Unknown-Cards

SDSL (profile)

Description: A profile containing configuration settings for an SDSL 48-Port Line Interface module.

Usage: Use the Read and List commands to make SDSL the working profile and list its contents. For example:

```
admin> read sdsl {1 1 0}
SDSL/{ shelf-1 slot-1 10} read
admin> list
[in SDSL/{ shelf-1 slot-1 0 }]
name=""
physical-address*={ shelf-1 slot-1 0 }
enabled=no
line-config={ 0 0 static { any-shelf any-slot 0 } }
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
SDSL/{ shelf-1 slot-1 0 } written
```

See Also: Enable, Line-Config, Name, Physical-Address

SDSL-ATM

Description: Specifies whether code images for SDSL-48-Port Line Interface Modules (LIMs) should be stored in Flash memory.

Usage: Valid values are as follows:

- `Auto` —Causes the system to load images for cards that are installed in the Stinger unit, and to skip images for cards that are not installed. This is the default.
- `Load`—Causes the system to load the image, even if there is no card of that type installed.
- `Skip`—Causes the system to skip the image, even if there is a card of that type installed.

Example: set SDSL-ATM = auto

Location: Load-Select

See Also: 48-DMT-ADSL

SDSL-ATM-V2

Description: *Not currently used.* Specifies whether code images for SDSL-ATM-v2 cards should be stored in Flash memory.

Usage: Valid values are as follows:

- `Auto` —Causes the system to load images for cards that are installed in the Stinger unit, and to skip images for cards that are not installed. This is the default.
- `Load`—Causes the system to load the image, even if there is no card of that type installed.
- `Skip`—Causes the system to skip the image, even if there is a card of that type installed.

Example: set SDSL-ATM-v2 = auto

Location: Load-Select

See Also: 48-DMT-ADSL

SDSL-Stat (profile)

Description: A profile indicating the status of the SDSL line.

Usage: Use the Read and List commands to make SDSL-Stat the working profile and list its contents. For example:

```
admin> read sdsl-stat { 1 9 1 }
SDSL-STAT/{ shelf-1 slot-9 1 } read

admin> list
[in SDSL-STAT/ {shelf-1 slot-9 1}]
physical-address*={ shelf-1 slot-9 1 }
line-state=active
error-count=0
physical-status={ 0 coe port-up 784000 784000 13 2 2 }
physical-statistic={ { 0 0 15 } yes 10 2 passed 5 +
```

See Also: Error-Count, Line-State, Physical-Address, Physical-Statistic, Physical-Status

Sealing-Current-On

Description: Enables/disables the sealing current function for testing purposes for all xDSL ports of the slot.

Valid values are as follows:

Usage:
- `Yes`—Sets sealing current on.
- `No`—Sets sealing current off.

Example: `set sealing-current-on = no`

Dependencies: Currently only the SDSL and HDSL2 LIMs have the hardware to support sealing current for testing purposes.

The XDSL-Slot-Config profile is used to configure parameters at slot level that are common to all xDSL LIMs. By default, an XDSL-Slot-Config profile is created with an index of [any-shelf any-slot 0]. You can then create a profile for a particular slot with shelf 1 slot 0 as the index. The item number of the index must be 0.

Location: XDSL-Slot-Config { any-shelf any-slot *N* }

See Also: Slot-Info (profile)

Sec-Domain-Name

Description: Specifies a secondary domain name that the Stinger unit searches by means of the Domain Name System (DNS).

Usage: Specify a secondary domain name. The default is null.

Example: `set sec-domain-name = xyz.com`

Location: IP-Global

See Also: Domain-Name

Secondary-SDTN-Empty-Enabled

Description: Specifies whether the short duration transaction network (SDTN) Secondary List Empty trap is enabled. SDTN is used by Telstra (Australia) for Visa/EFTPOS transactions. Details are in the MAX TNT TAOS addendum for 8.0.1.

Usage: Valid values are as follows:
- `Yes`—Specifies that the short duration transaction network (SDTN) secondary list empty trap is enabled. This is the default.
- `No`—Specifies that the short duration transaction network (SDTN) secondary list empty trap is disabled.

Example: `set secondary-sdtn-empty-enabled = no`

Location: Trap *name*

See Also: Primary-SDTN-Empty-Enabled

Seconds-History

Description: Description: Specifies the number of seconds to use as the basis for calculating average line utilization (ALU). When the ALU exceeds or falls below the Target-Utilization percentage for a specified number of seconds, the Stinger unit adds or subtracts bandwidth.

Usage: Usage: Specify an integer from 1 to 300. The default is 15 seconds.

Example: seconds-history = 60

The number of seconds you specify must be related to traffic patterns. For example, if you want to average spikes with normal traffic flow, you might want the Stinger unit to base ALU on a longer time period. If, on the other hand, traffic patterns consist of many spikes that are short in duration, you might want to specify a shorter period of time to give less weight to the short spikes.

Location: Answer-Defaults > MPP-Answer, Connection station > MPP-Options

See Also: Add-Persistence, Summarize-RIP-Routes, Target-Utilization

Section-State

Description: Indicates the state of the SONET section. A SONET section is a single run of cable. Section-terminating equipment is any adjacent pair of switches.

Usage: The Section-State value is read only.

Example: section-state = sonet-section-active-no-defect

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: Path-State

Security-Enabled

Description: Specifies whether the Stinger unit traps security events and sends a traps-PDU to the Simple Network Management Protocol (SNMP) manager. Security events notify users of security problems and track access to the unit. (For the most up-to-date information about security events, see the Ascend Enterprise MIB.) The Stinger unit unit traps the following security events:

Event	Indication
authenticationFailure (RFC-1215 trap-type 4)	The Stinger unit sending the trap is the addressee of a protocol message that is not properly authenticated.
consoleStateChange (Lucent trap-type 12)	The console associated with the passed console index has changed state. To read the console's state, get ConsoleEntry from the Ascend Enterprise MIB.
maxTelnetAttempts (Lucent trap-type 15)	There have been three consecutive failed attempts to log into the Stinger unit via Telnet.

Usage: Valid values are as follows:

- Yes—S pecifies that the Stinger unit sends security-event traps to the host specified by Host-Address. This is the default.

- No—Specifies that the Stinger unit does not send security-event traps.

Example: set security-enabled = yes

Location: Trap *host-name*

See Also: Alarm-Enabled, Community-Minus-1, Host-Name, Host-Name, Port-Enabled

Security-Level

Description: Specifies the level of security to use when generating messages.

Usage: Valid values are as follows:

- none—Specifies no authentication and no privacy. This is the default.

- auth-nopriv—Specifies authentication and no privacy.

- auth-priv—Specifies authentication and privacy.

Example: set security-level = auth-priv

Dependencies: For Auth-Priv to apply, you must set the Priv-Protocol and Priv-Password parameters in the SNMPv3-USM-User profile.

When you specify the auth-priv setting, all user transmissions with a security level of None or Auth-NoPriv are rejected with the error message Unsupported Security Level.

Location: SNMP;SNMPv3-Target-Param *name*

See Also: Active-Enabled, Host-Port, Msg-Proc-Model, Notify-Tag-List, Security-Model, Security-Name, Tag, Target-Params-Name

Security-Mode

Description: Specifies the type of terminal-server security in use.

Usage: Valid values are as follows:

- none—Specifies that a username and password are not required for terminal-server access. This is the default.

- partial—Specifies that a username, password, or both are required in command mode, but not in menu mode. If an interactive user toggles between menu mode and command mode, a password and username are required only upon entry to command mode.

- full —Specifies that a username, password, or both are required in order to enter the terminal server in both command mode and menu mode.

Example: set security-mode = full

Location: Terminal-Server

See Also: Menu-Mode-Options, System-Password

Security-Model

Description: Specifies the security model to use when generating SNMP messages.

Usage: Valid values are as follows:

- `v1`—Specifies the SNMP version 1 security model. This is the default.
- `v3-usm`—Specifies the SNMP version 3 User-Based Security Model (USM). For SNMPv3 Notifications support, specify `v3-usm`.

Example: `set security-model = v3-usm`

Dependencies: Consider the following:

- You can specify V1 only when you have also set Msg-Proc-Model to V1.
- You can specify V3-USM only when you set Msg-Proc-Model to V3.
- When Security-Model is set to V3-USM, you must configure an SNMPv3-USM-User profile, with the name specified for the Security-Name parameter, in order for the SNMPv3-Target-Param profile to have any effect.

Location: SNMPv3-Target-Param *name*

See Also: Active-Enabled, Host-Port, Msg-Proc-Model, Notify-Tag-List, Security-Name, Tag, Target-Params-Name

Security-Name

Description: Specifies a name used inSimple Network Management Protocol (SNMP) version 3 USM. The security name identifies the user on whose behalf SNMPv3 USM messages are generated.

Usage: Specify up to 22 characters. The default is null.

Example: `set security-name = newuser`

Dependencies: Security-Name applies only if Security-Model is set to V3-USM.

Location: SNMPv3-Target-Param *name*

See Also: Active-Enabled, Host-Port, Msg-Proc-Model, Notify-Tag-List, Security-Model, Tag, Target-Params-Name

Selectools-Enabled

Description: Indicates whether Selectools are enabled.

Usage: The Selectools-Enabled setting is read only. Yes indicates that Selectools are enabled. No indicates that Selectools are disabled.

Example: `selectools-enabled = yes`

Location: Base

See Also: Max-Switched-VCC-VPI, PHS-Support

Self-Test

Description: Indicates whether the module has passed the Power-On Self Test (POST).

Usage: Valid values for this read-only parameter are:

- `passed`—Indicates that the module passed the POST.
- `failed`—Indicates that the module failed the POST.

Example: `self-test = passed`

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Statistic,
HDSL2-Stat {shelf-*N* slot-*N N*} > Physical-Statistic,
SDSL-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Far-End-dB-Attenuation, Line-Quality, Line-Up-Timer, Physical-Address,
Rx-Signal-Present, Up-Down-Cntr

Send-Auth-Mode

Description: *Not currently used.* Specifies the authentication protocol that the Stinger unit
requests when initiating an outgoing call with Point-to-Point Protocol (PPP), Multilink PPP
(MP), or Multilink Protocol Plus (MP+) encapsulation.

Usage: The answering side of the connection determines which authentication protocol the
connection uses (if any). If Calling-Line ID (CLID) authentication is in use, the
Send-Auth-Mode setting also defines the authentication protocol to use for incoming calls.

Send-ICMP-Dest-Unreachable

Description: Specifies whether the unit sends Internet Control Message Protocol (ICMP)
destination-unreachable packets.

Usage: Valid values are as follows:

- `Yes`—Specifies that the unit sends ICMP destination-unreachable packets. This is the
  default.
- `No`—Specifies that the unit does not send ICMP destination-unreachable packets.

Example: `send-icmp-dest-unreachable = no`

Dependencies: Consider the following:

- Set Send-ICMP-Dest-Unreachable to No only in VoIP environments. Doing so in a
  non-VoIP environment can break required behavior for IPv4 routers, such as Path MTU
  Discovery.
- When operating under heavy call volumes, enabling this parameter reduces the load
  placed on the shelf controller.
- For Voice over IP (VoIP) applications, UDP for-me packets can arrive at a rate of200
  packets per second for each direction of the call. If the Stinger unit is not listening on a
  port for the for-me packets while setting up or tearing down a call, the unit returns ICMP
  destination-unreachable packets at the same rate as the call. To prevent the performance
  penalty caused by this situation, set Send-ICMP-Dest-Unreachable to No.

- For H.323 VoIP, the value of Send-ICMP-Dest-Unreachable must be set to Yes for MultiVoice operations. Doing so allows the Stinger unit to detect and respond to misdirected ICMP packets by responding with an ICMP unreachable packet, rather than by redirecting the packet to the control modules.

Location: IP-Global

See Also: IP-Global (profile)

Send-Password

Description: *Not currently used.* Specifies the password that the Stinger unit sends to the remote end during authentication of an outgoing Point-to-Point Protocol PPP) connection.

Usage: When this parameter becomes avbailable, you will be able to speecify a password for PPP authentications.

Location: Connection > PPP-Options

Serial (profile)

Description: A profile that specifies physical interface settings for a system serial interface.

Usage: Use the Read and List commands to make Serial the working profile and list its contents. For example:

```
admin> read serial { 1 c 2 }
SERIAL/{ shelf-1 controller 2 } read

admin> list
[in SERIAL/{ shelf-1 controller 2 }]
physical-address*={ shelf-1 controller 2 }
term-rate=9600-bps
flow-control=none
user-profile=admin
auto-logout=no
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes, enter the Write command. For example:

```
admin> write
SERIAL/{ shelf-1 controller 2 } written
```

See Also: Auto-Logout, Flow-Control, Physical-Address, Term-Rate, User-Profile

Serial-Number

Description: Displays the unit's serial number.

Usage: The Serial-Number setting is read only.

Example: serial-number = 6201732

Location: Base, Slot-Info {shelf-*N* slot-*N N*}

See Also: Software-Level, Software-Revision, Software-Version

Service

Description: Enables or disables immediate mode, and specifies the immediate service type. In immediate mode, an interactive user immediately connects to a host by means of a specified service.

Usage: Valid values are as follows:

Usage: Specify one of the following values:

- `none` —Specifies no immediate service. This is the default.
- `telnet`—Specifies immediate Telnet service.
- `raw-tcp` —Specifies an immediate TCP connection.
- `rlogin`—Specifies immediate Rlogin service.

Example: `set service = rlogin`

Dependencies: If terminal services are disabled, Service does not apply.

Location: Terminal-Server > Immediate-Mode-Options

See Also: Host, Immediate-Mode-Options, Port,Service, Telnet-Host-Auth

Ses-Rate-Mode

Description: Specifies the DSL data rate mode for the connection.

Usage: Currently, only the Singlebaud setting is supported on the SDSL card.

- `autobaud`—Specifies that a DSL modem should train up to a set data rate. If a DSL modem cannot train to this data rate, it connects to the closest rate to which it can train (the modem's ceiling rate).
- `singlebaud`—Causes the system to train to a single data rate, even if the DSL modem can train at a higher or lower data rate. If the DSL modem cannot train to the specified single rate, the connection fails.

Example: `set ses-rate-mode  =  singlebaud`

Location: Connection > Session-Options

See Also: Ses-Rate-Type, Ses-SDSL-Rate

Ses-Rate-Type

Description: Specifies the per-session modem type for rate control.

Usage: Valid values are as follows:

- `disabled`—Specifies that modem rate control is not active for the connection. This is the default.
- `SDSL`—Specifies SDSL modem rate control.

Example: `set ses-rate-type = sdsl`

Location: Connection > Session-Options

See Also: Ses-Rate-Type, Ses-SDSL-Rate

Ses-SDSL-Rate

Description: Specifies the symmetrical data rate. This setting applies to connections on the 24-port SDSL data or voice card.

Usage: Specify one of the following values:

     144000
     272000
     400000
     528000
     784000
     1168000
     1552000

Example: `set ses-sdsl-rate = 1552000`

Location: Connection > Session-Options

See Also: Ses-Rate-Type

SessionID-Base

Description: Specifies the base number the Stinger unit uses for generating a unique ID for each session.

The Stinger unit can pass a session ID to SNMP, RADIUS, or other external entities. If the value of SessionID-Base is nonzero, the Stinger unit uses it as the initial base for calculating session IDs after a system reset. The ID for each subsequent session is incremented by 1. If SessionID-Base is zero, the Stinger unit sets the initial base for session IDs to the absolute clock. For example, if the clock is 0x11cf4959, the subsequent session IDs use 0x11cf4959 as a base. However, if the clock is changed and the system reboots or clears NVRAM, session IDs might be duplicated.

Usage: Specify an integer from 1 to 2147483647. The default is 0 (zero), which causes the Stinger unit to use the absolute clock to generate a session ID base.

Example: `set sessionid-base = 0`

Dependencies: You can also set a session ID base by using the Set SessID command in the terminal-server interface. The terminal server provides a Show SessID command to display the next session ID the unit will use.

Location: System

See Also: Beta-IMA-Value, Delta-Cell-Delin-Value, Gamma-IMA-Value, Idle-Logoutt, Parallel-Dialing, Single-File-Incoming, System-Rmt-Mgmt, Use-Trunk-Groups

Session-Info

Description: A subprofile containing default settings for incoming connections. The settings in the Session-Info subprofile are not specific to any encapsulation method or network protocol.

Usage: With Answer-Defaults as the working profile, list the Session-Info subprofile. For example:

```
admin> list session-info
[in ANSWER-DEFAULTS:session-info]
idle-timer=120
ts-idle-mode=no-idle
ts-idle-timer=120
max-call-duration=0
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile enter the List command and append two periods.

```
admin> list ..
```

Location: Answer-Defaults

See Also: Idle-Timer, Max-Call-Duration, TS-Idle-Timer,

Session-Options

Description: A subprofile that specifies session settings not specific to any encapsulation method or network protocol.

Usage: With a Connection profile as the working profile, list the Session-Options subprofile. For example:

```
admin> list session-options
[in CONNECTION/tim:session-options]
idle-timer=120
ts-idle-mode=no-idle
ts-idle-timer=120
backup=""
max-call-duration=0
rx-data-rate-limit=0
tx-data-rate-limit=0
ses-sdsl-rate=784000
ses-rate-mode=autobaud
ses-rate-type=disabled
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile enter the List command and append two periods.:

```
admin> list ..
```

Location: Connection *station*

See Also: Backup, Idle-Timer, Max-Call-Duration, Rx-Data-Rate-Limit, Ses-Rate-Type, TS-Idle-Mode, TS-Idle-Timer, Tx-Data-Rate-Limit

Severely-Errored-Second

Description: Indicates the number of 1-second intervals during which at least 50 cyclic redundancy check (CRC) anomalies are declared or one or more loss of synchronous word (LOSW) defects are declared.

Usage: Severely-Errored-Second is a read-only display for checking operations.

Example: `severely-errored-second = 1`

Location: HDSL2-Stat { shelf-*N* slot-*N N* } > `Physical-Statistic`

See Also: Errored-Second, LOSW-Second, Unavailable-Second

Shared-Prof

Description: Specifies whether multiple incoming calls can share a Connection profile.

Usage: Valid values are as follows:

- `Yes`—Specifies that the Stinger unit allows more than one caller to share the same profile, provided that no IP address conflicts result.
- `No`—Specifies that the Stinger unit does not allow shared profiles. This is the default.

Example: `set shared-prof = yes`

Dependencies: Consider the following:

- Use the Shared-Prof setting only when the Stinger unit dynamically assigns each caller an IP address. A shared profile must not contain a hard-coded remote IP address.
- If you set Shared-Prof to Yes in the IP-Global profile, the Shared-Prof setting in a Connection profile has no effect.
- If you set Shared Prof to No in a Connection profile, the Shared-Prof setting in the IP-Global profile allows or disallows shared profiles systemwide.
- If you set Share-Prof to No in the IP-Global profile, and you specify Yes for Shared-Prof in the Connection profile, the setting in the Connection profile takes precedence.

Location: IP-Global

See Also: Connection (profile)

Shelf

Description: Specifies the shelf in which an item resides. If you are using a single-shelf system, the shelf number is always 1.

Usage: For a Device-Address or Physical-Address setting, specify an integer from 1 to 6. In an Error profile, the Shelf setting is read only.

Example: `set shelf = 1`

Location: Device-Address, Error, Physical-Address

See Also: Device-Address, Item-Number, Physical-Address, Slot

Short-Flag

Description: Enables/disables use of a shorter address format for system-generated Asynchronous Transfer Mode (ATM) addresses.

Usage: The default setting of false specifies use of the 20-byte address. If you are planning to configure ATM addresses of less than 20 bytes within your PNNI network, specify `true`.

Example: set Short-Flag = true

Dependencies: In the ATM-Prefix profile, when the SPVC and SVC prefix addresses are zero, the switched permanent virtual channel (SPVC) prefix and switched virtual channel (SVC) prefix take their value from the Private Network-to-Network Interface (PNNI) node prefix. If you explicitly configure an address or a prefix setting, the system uses the value you specify rather than the system-generated default. If you delete the ATM-Prefix profile, the system creates a new one at the next system startup and derives the default prefix from the primary controller serial number.

Location: ATM-Prefix

See Also: Address, ATM-Prefix (profile), Length, LIM-Sparing-Enabled,

Short-Location

Description: Specifies the distance detected to the short circuit in a copper loop test (CLT).

Usage: Specify the number of units. Distance is reported in centimeters if units are set to metric. Distance is reported in hundredths of feet if units are set to english. A value of 0 indicates no short circuit detected.

Example: short-location = 52

Dependencies: The `shortloc-unit` parameter must be set to the appropriate unit to make `short-location` effective.

Location: Clt-Result

See Also: CLTcmd, CLT-Command (profile), First-Coil-Location, Voice-Detection

Shortloc-Gauge

Description: Specifies the gauge of the cable in the loop of a copper loop test (CLT).

Usage: Valid values are as follows:
- In English units, the value is 22, 24 or 26 AWG.
- In metric units, the value is 4, 5, or 6 tenths of a millimeter.

Example: shortloc-gauge = 4

Dependencies: The Shortloc-Unit parameter must be specified correctly to make the Shortloc-Gauge parameter effective.

Location: CLT-Command

See Also: CLT-Result (profile), Fclloc-Unit, Shortloc-Unit, Test-Operation

Shortloc-Type

Description: Specifies the type of short circuit test in a copper loop test (CLT).

Usage: Valid values are:

- `detect`—Short circuit detection occurs prior to the measure of the short circuit location.
- `nodet`—Short circuit detection does not occur prior to the measure of the short circuit location.

Example: `set shortloc-type = detect`

Location: CLT-Command

See Also: CLT-Result (profile), Fclloc-Gauge, Fclloc-Unit, Shortloc-Gauge, Test-Operation

Shortloc-Unit

Description: Units of measurement for short circuit location test in a copper loop test (CLT)..

Usage: Valid values are

- `english`—English units are used for the measurement.
- `metric`—Metric units are used for the measurement.

Example: `set shortloc-unit = metric`

Dependencies: The Shortloc-Gauge parameter must be specified correctly to make the Shortloc-Unit parameter effective.

Location: CLT-Command

See Also: CLT-Result (profile), Fclloc-Gauge, Fclloc-Unit, Shortloc-Gauge, Test-Operation

Signalling-State

Description: Indicates the signaling state of the port.

Usage: The signaling state can be `not-configured`, `up`, or `down`.

Example: `Signalling-State = Up`

Location: ATM-If-Stat { { *N N* } *N* }

See Also: PNNI-Link-State, Port-State

Sig-Vcc-Rx-Qos-Name

Description: Specifies the signalling virtual channel connection quality of service (VCC QoS) parameters for the receive direction.

Usage: Specify up to 31 characters.

Example: `set sig-vcc-rx-qos-name = default-ctl`

Location: ATM-If-Config { { any-shelf any-slot *N* } *N*} > Extension-Config

See Also: Config-Side, Config-Type, Conn-Estab-Interval

Sig-Vcc-Rx-Tdesc-Index

Description: *ILMI is not currently used.* Specifies the traffic descriptor index which is used during the interim link management interface (ILMI) autoconfiguration to specify the advertised signaling virtual channel connection (VCC) traffic parameters for the receive direction.

Usage: When this parameter becomes available, the default value of 2 specifies the default-ctl traffic descriptor used for PNNI signalling and routing control.

Example: `sig-vcc-tx-tdesc-index = 2`

Location: ATM-If-Config { { any-shelf any-slot *N* } *N*} > Extension-Config

Sig-Vcc-Tx-Qos-Name

Description: Specifies the signalling virtual channel connection quality of service (VCC QoS) parameters for the transmit direction.

Usage: Specify up to 31 characters.

Example: `set sig-vcc-tx-qos-name = default-ctl`

Location: ATM-If-Config { { any-shelf any-slot *N* } *N*} > Extension-Config

See Also: Config-Side, Config-Type, Conn-Estab-Interval

Sig-Vcc-Tx-Tdesc-Index

Description: *ILMI is not currently used.* Traffic descriptor index used during interim link management interface (ILMI) autoconfiguration to specify the advertised signaling virtual channel connection (VCC) traffic parameters for the transmit direction.

Usage: When this parameter becomes available, the default 2 specifies the default-ctl traffic descriptor used for Private Network-to-Network Interface (PNNI) signaling and routing control.

Example: `set sig-vcc-rx-tdesc-index = 2`

Location: ATM-If-Config { { any-shelf any-slot *N* } *N*} > Extension-Config

Silent-Mode

Description: Specifies whether the Stinger unit suppresses status messages upon establishment of an interactive terminal-server connection.

Usage: Valid values are as follows:

- `Yes`—Specifies that the Stinger unit suppresses status messages upon establishment of an interactive terminal-server connection.
- `No`—Specifies that the Stinger unit sends all status messages upon establishment of an interactive terminal-server connection. This is the default.

Example: set silent-mode = yes

Dependencies: If terminal services are disabled, Silent-Mode does not apply.

Location: Terminal-Server > Terminal-Mode-Configuration

See Also: Terminal-Mode-Configuration

Single-File-Incoming

Description: Specifies whether the Stinger unit treats incoming calls as a single-file list, or handles them in parallel.

Usage: Valid values are as follows:

Example:

- `Yes`—Specifies that the Stinger unit answers and routes one call before answering and routing the next call. This is the default.
- `No`—Specifies that the Stinger unit answers and routes an incoming call immediately.

Example: set single-file-incoming = yes

Location: System

See Also: Parallel-Dialing

Site-Minus-1

Description: *Not currently used.* Specifies the number representing the highest level of the Private Network-to-Network Interface (PNNI) hierarchy that lies within the site, minus one scope.

Usage: When this parameter becomes available, you will be able to specify a number from 0 to 104. The default value is 80. Specify a number from 0 to 104. The default value is 80.

Example: site-minus-1 = 80

Location: PNNI-Node-Config *N* > Node-Scope-Mapping

See Also: Intra-site ,Local-Net, Local-Net-Plus-1

Site-Plus-1

Description: *Not currently used.* Specifies the number representing the highest level of the Private Network-to-Network Interface (PNNI) hierarchy that lies within the site, plus one scope. The default value is 72.

Usage: When this parameter becomes available, you will be able to specify a number from 0 to 104. The default value is 72.

Example: set site-plus-1 = 72

Location: PNNI-Node-Config *N* > Node-Scope-Mapping

See Also: Intra-site ,Local-Net, Local-Net-Plus-1

SLIP

Description: Enables or disables the use of the terminal-server SLIP command.

Usage: .Valid values are as follows:

- Yes—Enables a user to begin Serial Line Internet Protocol (SLIP) sessions from the terminal-server interface.
- No—Disables a user from beginning SLIP from the terminal-server interface. This is the default.

Example: set slip = yes

Dependencies: If terminal services are disabled, SLIP does not apply.

Location: Terminal-Server > SLIP-Mode-Configuration

See Also: Ping, SLIP-Mode-Configuration, TCP, Telnet, Traceroute

SLIP-BOOTP

Description: Specifies whether the Stinger unit responds to bootstrap protocol (BOOTP) within Serial Line Internet Protocol (SLIP) sessions.

Usage: Valid values are as follows:

- Yes—Enables the Stinger unit to respond to a BOOTP request from the calling unit during a SLIP session.
- No—Disables BOOTP for a SLIP session. The user is prompted to accept an IP address at the start of the SLIP session. This is the default.

Example: set slip-bootp = yes

Dependencies: If terminal services are disabled, SLIP-BOOTP does not apply.

Location: Terminal-Server > SLIP-Mode-Configuration

See Also: SLIP, SLIP-Mode-Configuration

SLIP-Mode-Configuration

Description: A subprofile with terminal-server configuration options for asynchronous Serial Line Internet Protocol (SLIP) users.

Usage: With Terminal-Server as the working profile, list the SLIP-Mode-Configuration subprofile. For example:

```
admin> list slip-mode-configuration
[in TERMINAL-SERVER:slip-mode-configuration]
slip=no
slip-bootp=no
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile enter the list command and append two periods:

```
admin> list ..
```

Location: Terminal-Server

See Also: SLIP, SLIP-BOOTP

Slot

Description: Specifies the number of the item's expansion slot. Physical expansion slots are numbered from 1 to 16, starting with 1 for the slot just below the shelf controller. The slot value 17, `controller`, or `c` specifies the shelf control module.

Usage: For a Device-Address or Physical-Address setting, specify an integer from 1 to 17. In an Error profile, the Slot setting is read only.

Example: `set slot = 10`

Location: Device-Address, Error, Physical-Address

See Also: Device-Address, Item-Number, Physical-Statistic, Shelf

Slot-Address

Description: Indicates or specifies the physical address of the slot.

Usage: In most cases, the value of Slot-Address is obtained from the system. However, you can clone a profile by reading an existing one and changing its physical address. To modify the value after reading a Slot-Info, Slot-State, or Slot-Type profile, use the List and Set commands. For example:

```
admin> list slot-address
[in SLOT-INFO/{ shelf-1 slot-9 37 }:slot-address]
shelf=shelf-1
slot=slot-9
item-number=37

admin> set shelf=shelf-2
```

As an alternative, you can simply use the Set command. For example:

```
admin> set slot-address shelf=shelf-2
```

Location: Slot-Info {shelf-*N* slot-*N N*}, Slot-State {shelf-*N* slot-*N N*},
Slot-Type {shelf-*N* slot-*N N*}

See Also: Physical-Address

Slot-Enabled

Description: Specifies whether the host specified by Host-Address receives a multishelf trap when the SNMP MIB object multiShelfStateTrapState (multiShelf 6) is set to Enabled. This object determines whether a trap is generated when a multishelf link is down (if one of the shelves is down). Ifthe object is set to Disabled (2), the trap is not sent, regardless of your Trap profile configuration.

Usage: Valid values are as follows:

- `Yes`—Specifies that the host receives a multishelf trap. This is the default.
- `No`—Specifies that the host does not receive a multishelf trap.

Example: set slot-enabled = yes

Dependencies: If you set the multiShelf.multiShelfStatTrapState object to Disabled (2), neither host receives multishelf traps.

Location: Trap *host-name*

See Also: Host-Name, Host-Name

Slot-Info (profile)

Description: A profile that displays the software version, serial number, and other system information about the Stinger unit.

Usage: The Slot-Info profile is read only. Use the Get command to display its contents.

Example:

```
admin> get slot-info
[in SLOT-INFO]
slot-address={ shelf-1 slot-7 0 }
serial-number=77777777
software-version=1
software-revision=2
software-level=E
software-release=""
hardware-level=0
hardware-rework-count=0
```

See Also: Hardware-Level, Hardware-Rework-Count, Serial-Number, Slot-Address, Software-Level, Software-Release, Software-Revision, Software-Version

Slot-Number

Description: Indicates the slot number of the module (any Lim or trunk module on a Stinger unit) owning the virtual channel connection (VCC) on an Asynchronous Transfer Mode (ATM) link.

Usage: The Slot-Number value is read only, and can be one of the following:

Any-Slot
Slot-1
Slot-2
Slot-3
Slot-4
Slot-5
Slot-6
Slot-7
Control-Module—Primary Control Module (CM) pseudo-slot
Control-Module-2—Secondary Control Module (CM) pseudo-slot
Slot-10
Slot-11
Slot-12
Slot-13
Slot-14
Slot-15
Slot-16
Trunk-Module-1—Trunk Module 1 pseudo-slot
Trunk-Module-2—Trunk Module 2 pseudo slot
Slot-Forward—Shelf-controller forward pseudo-slot

Example: `set slot-number = slot-10`

Location: ATMPVC-Stat *circuit-name* > VCC-Members > VCC Members *N,* ATMVCC-Stat *circuit-name* > VCC-Ident

Slot-Profile-Change-Enabled

Description: Specifies whether the system generates a trap when a Slot-State profile changes. A trap indicates that a Slot-State profile has been created as a result of slot insertion, or that a slot state has transitioned to Oper-State-Down, Oper-State-Up, Oper-State-Dump, or Oper-State-None.

Usage: Valid values are as follows:

- Yes—Specifies that the system generates a trap. This is the default.

- No—Specifies that the system does not generate a trap.

Example: `set slot-profile-change-enabled = no`

Location: Trap *host-name*

See Also: Current-State, Slot-State (profile)

Slot-State (profile)

Description: A profile that stores the current state of a slot module. The Slot-State profile does not reside in NVRAM, so it does not persist across system resets or power cycles. Simple Network Management Protocol (SNMP) managers can read the Slot-State profile.

Usage: Use the Read and List commands to make Slot-State the working profile and list its contents. For example:

```
admin> read slot-state {1 2 0}
SLOT-STATE/{ shelf-1 slot-2 0 } read
admin> list
[in SLOT-STATE/{ shelf-1 slot-2 0 }]
slot-address*={ shelf-1 slot-2 0 }
current-state=oper-state-none
reqd-state=reqd-state-up
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes, enter the Write command. For example:

```
admin> write
SLOT-STATE/{ shelf-1 slot-2 0 } written
```

See Also: Current-State, Reqd-State, Slot-Address

Slot-Static-Config (profile)

Description: One Slot-Static-Config profile is available for each line interface module (LIM) and control module slot.

Usage: Use the Dir and Read commands to make Slot-Static-Config the current profile. The following listing includes the ATM-Parameters subprofile.

```
admin> list
[in SLOT-STATIC-CONFIG/{ shelf-1 slot-1 0 }]
name = ""
physical-address* = { shelf-1 slot-1 0 }
atm-parameters = { low-priority }
admin> list atm-parameters
[in SLOT-STATIC-CONFIG/{ shelf-1 slot-1 0 }:atm-parameters]
incoming-priority = low-priority
```

Slot-Type

Description: Indicates the type of device in the slot. If the actual type of device discerned by the system at startup differs from the type indicated by Slot-Type, the Stinger unit assumes that you have changed slot cards. It then deletes the old Simple Network Management Protocol (SNMP) interface numbers.

Usage: Valid values are:

Value	Indicates
`32idsl-card`	32 ISDN DSL card.
`Al-dmtadsl-atm-card`	12 port DMT ADSL ATM card.
`Annexb-dadsl-atm-card`	12 port ANNEX B DMT ADSL ATM card.
`Annexc-dadsl-atm-card`	40 Port CT Annex C ADSL ATM card.
`Cm`	Stinger unit 10 control module in slot 8 and 9.
`Dadsl-atm-24-card`	24 port DMT ADSL ATM card.
`Dmtadsl-card`	DMT ADSL card.
`Ds3-atm2-card`	Single interface DS3/ATM card Vers 2.
`Ds3-atm-card`	Single interface DS3/ATM card.
`Ds3-atm-trunk-daughter-card`	Stinger unit 10: ATM DS3 trunk daughter card.
`E3-atm-card`	Single interface E3/ATM card Vers 2.
`E3-atm-trunk-daughter-card`	Stinger unit 10: ATM E3 trunk daughter card.
`Glite-atm-48-card`	48 port G-lite ADSL ATM card.
`Hdsl2-card`	32 port HDSL2 card.
`Ima-24-e1-card`	Stinger unit 10 24-port IMA_E1 card.
`Ima-24t1-card`	Stinger unit 10 24-port IMA_T1 card.
`Ima-8-e1-card`	Stinger unit 10 8-port IMA_E1 card.
`Ima-8-t1-card`	Stinger unit 10 8-port IMA_T1 card.
`None`	No slot card present in the addressed slot.
`Oc3-atm-card`	Single interface OC3/ATM card.
`Oc3-atm-trunk-daughter-card`	Stinger unit 10:ATM OC3 trunk daughter card.
`Router-card`	Stand alone router card.
`Sdsl-atm-card`	SDSL ATM card.
`Sdsl-atm-v2-card`	SDSL ATM version 2 card.
`Sdsl-card`	SDSL card.
`Stngr-32-idsl-card`	32 port Stinger unit IDSL card with ATM.
`Stngr-40a-adsl-card`	40 Port CT Annex A ADSL ATM card.
`Stngr-48a-adsl-card`	48 Port GS Annex A ADSL ATM card.
`Stngr-48b-adsl-card`	48 Port GS Annex B ADSL ATM card.
`Stngr-48c-adsl-card`	48 Port GS Annex C ADSL ATM card.
`Terminator-card`	Stinger unit 10: terminator card for terminating DSL sessions

Value	Indicates
Unknown	Current software does not recognize the card in the addressed slot.

Example: `slot-type = dadsl-atm-24-card`

Dependencies: You can also display the slot type for a particular device by using the terminal-server Show command.

Location: Admin-State-Phys-If {shelf-*N* slot-*N N*}, Slot-Type {shelf-*N* slot-*N N*}

See Also: Slot, Slot-Address, Slot-Info (profile), Slot-State (profile)

Slot-Type (profile)

Description: A profile that stores information about the type of slot card installed in each shelf/slot location. The Slot-Type profile resides in NVRAM and persists over system resets.

Usage: Use the Read and List commands to make Slot-Type the working profile and list its contents. For example:

```
admin> read slot-type {1 8 0}
SLOT-TYPE/{ shelf-1 slot-8 0 } read

admin> list
[in SLOT-TYPE/{ shelf-1 slot-8 0 }]
slot-address*={ shelf-1 slot-8 0 }
slot-type=sdsl-card
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes, enter the Write command. For example:

```
admin> write
SLOT-TYPE/{ shelf-1 slot-8 0 } written
```

See Also: Slot, Slot-Address, Slot-Info (profile), Slot-State (profile), Slot-Type

Slot-VPI-VCI-Range

Description: A subprofile that enables you to specify a VPI/VCI range.

Usage: With ATM-Config as the working profile, use the List command to display the Slot-VPI-VCI-Range subprofile. For example:

```
admin> list slot-vpi-vci-range
[in ATM-CONFIG:slot-vpi-vci-range]
slot-vpi-vci-range[1] = vpi-0-15-vci-32-127
slot-vpi-vci-range[2] = vpi-0-15-vci-32-127
slot-vpi-vci-range[3] = vpi-0-15-vci-32-127
slot-vpi-vci-range[4] = vpi-0-15-vci-32-127
slot-vpi-vci-range[5] = vpi-0-15-vci-32-127
slot-vpi-vci-range[6] = vpi-0-15-vci-32-127
slot-vpi-vci-range[7] = vpi-0-15-vci-32-127
slot-vpi-vci-range[8] = ( bad value )
```

```
slot-vpi-vci-range[9] = ( bad value )
slot-vpi-vci-range[10] = vpi-0-15-vci-32-127
slot-vpi-vci-range[11] = vpi-0-15-vci-32-127
slot-vpi-vci-range[12] = vpi-0-15-vci-32-127
slot-vpi-vci-range[13] = vpi-0-15-vci-32-127
slot-vpi-vci-range[14] = vpi-0-15-vci-32-127
slot-vpi-vci-range[15] = vpi-0-15-vci-32-127
slot-vpi-vci-range[16] = vpi-0-15-vci-32-127
```

This is an array, and cannot be set directly. To close the Slot-VPI-VCI-Range subprofile and return to a higher context in the profile:

```
admin> list ..
```

Location: ATM-Config

See Also: Slot-VPI-VCI-Range N

Slot-VPI-VCI-Range *N*

Description: Specifies the valid Virtual Path Identifier/Virtual Channel Identifier (VPI/VCI) range for the link interface modules (LIMs).

Usage: You use the Slot-VPI-VCI-Range value to select the best combination of VPI and VCI bit to fit the list of supported VPI/VCI pairs obtained from the network provider. The new values take effect as soon as you write the profile. Following are the possible settings and the corresponding number of VPI/VCI bits:

Option	# of VPI bits	# of VCI bits
VPI-0-3-VCI-32-511	2	9
VPI-0-7-VCI-32-255	3	8
VPI-0-15-VCI-32-127	4	7
VPI-0-31-VCI-32-63	5	6

Example: `set slot-vpi-vci-range = vpi-0-31-vci-32-63`

Dependencies: The range you specify is shared by all ports of the LIM. Be very careful when changing this value. In order to make the new range effective, the system drops all connections involving any of the ports of the LIM.

Location: ATM-Config > Slot-VPI-VCI-Range

See Also: Slot-VPI-VCI-Range

SNMP (profile)

Description: A profile containing settings that determine SNMP security, specify a contact and location, and control which hosts can access the Stinger unit by means of the SNMP manager utilities.

Usage: Use the Read and List commands to make SNMP the working profile and list its contents. For example:

```
admin> read snmp
SNMP read

admin> list
[in SNMP]
enabled=no
read-community=public
read-write-community=write
enforce-address-security=no
read-access-hosts=[ 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 ]
write-access-hosts=[ 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 ]
contact=""
location=""
queue-depth=0
read-write-enabled=no
csm-modem-diag=no
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes enter the Write command:

```
admin> write
SNMP written
```

See Also: Contact, Enable, Enforce-Address-Security, Location, Queue-Depth, Read-Access-Hosts, Read-Write-Community, Read-Write-Access, Read-Write-Enabled, Write-Access-Hosts

SNMP-Interface

Description: Indicates the Simple Network Management Protocol (SNMP) interface number assigned to the device by the system.

Usage: The SNMP-Interface setting is read only.

Example: `snmp-interface = 65`

Dependencies: At system startup, the Stinger unit reads the Admin-State-Perm-If and Admin-State-Phys-If profiles. If the addressed device is not present in the system and has been replaced by a device of another type, the unit deletes the profile associated with the device. The next time the unit is reset or power cycled, the old device's SNMP interface number is made available for reassignment. Removing a module and leaving the slot empty, however, does not free up interface numbers. If you reinstall the module, the unit reassigns the same interface number. In addition, removing a slot card and replacing it with a slot card of another type does not immediately free up the old interface numbers. New numbers are assigned to the new module, and the old numbers become available at the next power cycle or system reset.

Location: Admin-State-Perm-If *station*, Admin-State-Phys-If {shelf-*N* slot-*N N*}

See Also: SNMP (profile)

SNMP-Message-Type

Description: Specifies the version of Simple Network Management Protocol (SNMP) used by the SNMP agent in the unit.

Usage: Valid values are as follows:

- `V1-and-V3`—Causes the SNMP agent to use both SNMPv1 and SNMPv3 protocols. This is the default.
- `V1-only`—Causes the SNMP agent to use only the SNMPv1 protocol and discard any other types of messages.
- `V3-only`—Causes the SNMP agent to use only the SNMPv3 protocol and discard other types of messages.

Example: set snmp-message-type = v3-only

Location: SNMP

See Also: Security-Level

SNMPv3-Notification (profile)

Description: This profile in conjunction with the SNMPv3-Target-Params profile enables you to configure the Stinger unit to perform the following tasks:

- Send SNMPv1 traps (Trap PDUs) or SNMPv2 Traps (Trap2 PDUs).
- Send traps to a specified IP address and port.
- Send Trap2 PDUs with different levels of security.
- Send Trap2 PDUs with different user names.

Usage: Use the Dir, Read and List commands to make SNMPv3-Notification profile the current profile.

Example:

```
admin> dir snmpv3-notif
21  11/15/2000 17:32:54  default
admin> read snmpv3-notif default
SNMPV3-NOTIFICATION/default read
admin> list
[in SNMPV3-NOTIFICATION/default]
name* = default
active-enabled = yes
tag = default
type = trap
```

See Also: SNMPv3-Target-Param (profile)

SNMPv3-Target-Param (profile)

Description: This profile in conjunction with the SNMPv3-Notification profile enables you to configure the Stinger unit to perform the following tasks:

• Send SNMPv1 traps (Trap PDUs) or SNMPv2 Traps (Trap2 PDUs).

• Send traps to a specified IP address and port.

• Send Trap2 PDUs with different levels of security.

• Send Trap2 PDUs with different usernames.

The SNMPv3 notification feature follows the specifications in RFC 2573.

Usage: Use the Dir, Read, and List commands to makethe —CTarget-Params profile the current profile.

Example:

```
admin> dir snmpv3-target
12  11/15/2000 17:32:54  default
admin> read snmpv3-target default
SNMPV3-TARGET-PARAM/default read
admin> list
[in SNMPV3-TARGET-PARAM/default]
name* = default
active-enabled = yes
msg-proc-model = v1
security-model = v1
security-name =
security-level = none
```

See Also: SNMPv3-Notification (profile)

SNMPv3-Usm-User (profile)

Description: A profile in which you create and edit user profiles for support of SNMPv3 USM privacy.

Usage: Following is a listing of the SNMPv3-USM-User profile, shown with default settings:

```
[in SNMPV3-USM-USER/groupz]
name* =groupz
active-enabled = no
read-write-access = no
auth-protocol = md5-auth
priv-protocol = no-priv
auth-key =
priv-key =
```

See Also: Auth-Key, Auth-Protocol, Priv-Key, Priv-Protocol

SNTP-Info

Description: A subprofile used for configuring the SNTP server.

Usage: The following lists the sntp-info subprofile

```
[in IP-GLOBAL:sntp-info]
enabled = sntp-disabled
GMT-offset = utc+0000
host = [ 0.0.0.0 0.0.0.0 0.0.0.0 ]
update-threshold = 10
```

Location: IP-Global

See Also: GMT-Offset, Update-Threshold

Software-Level

Description: Indicates the software-version level of the shelf-controller code.

Usage: The Software-Level setting is read only.

Example: `software-level = H`

Location: Base, Slot-Info {shelf-*N* slot-*N N*}

See Also: Hardware-Level, Software-Release, Software-Revision, Software-Version

Software-Release

Description: Displays the engineering or candidate release number of the code image.

Usage: The Software-Release setting is read only.

Example: `software-release = 7.0`

Location: Slot-Info {shelf-*N* slot-*N N*}

See Also: Hardware-Level, Software-Revision, Software-Version

Software-Revision

Description: Indicates the software revision number of the unit.

Usage: The Software-Revision setting is read only.

Example: `software-revision = 1`

Location: Base, Slot-Info {shelf-*N* slot-*N N*}

See Also: Hardware-Level, Software-Release, Software-Version

Software-Version

Description: Indicates the software version of the unit.

Usage: The Software-Version setting is read only.

Example: `software-version = 1.0`

Dependencies: You can also use the Version command to view the current system software version.

Location: Base, Slot-Info {shelf-*N* slot-*N N*}

See Also: Hardware-Level, Software-Release, Software-Revision

SONET-Far-End-Line-Coding-Violations

Description: Indicates the number of bit-interleaved parity errors at the far-end device's Line layer. A Synchronous Optical Network (SONET) line consists of one or more sections.

Usage: The SONET-Far-End-Line-Coding-Violations value is read only.

Example: `sonet-far-end-line-coding-violations = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Errored-Seconds,
SONET-Far-End-Line-Severely-Errored-Seconds,
SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations,
SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Severely-Errored-Seconds,
SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations,
SONET-Line-Errored-Seconds, SONET-Line-Severely-Errored-Seconds,
SONET-Line-Unavailable-Seconds, SONET-Path-Coding-Violations,
SONET-Path-Errored-Seconds, SONET-Path-Severely-Errored-Seconds,
SONET-Path-Unavailable-Seconds, SONET-Section-Coding-Violations,
SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds,
SONET-Section-Severely-Errored-Seconds

SONET-Far-End-Line-Errored-Seconds

Description: Indicates the number of errored seconds at the far-end device's Line layer. A Synchronous Optical Network (SONET) line consists of one or more sections.

Usage: The SONET-Far-End-Line-Errored-Seconds value is read only.

Example: `sonet-far-end-line-errored-seconds = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,
SONET-Far-End-Line-Severely-Errored-Seconds,
SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations,

SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Severely-Errored-Seconds,
SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations,
SONET-Line-Errored-Seconds, SONET-Line-Severely-Errored-Seconds,
SONET-Line-Unavailable-Seconds, SONET-Path-Coding-Violations,
SONET-Path-Errored-Seconds, SONET-Path-Severely-Errored-Seconds,
SONET-Path-Unavailable-Seconds, SONET-Section-Coding-Violations,
SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds,
SONET-Section-Severely-Errored-Seconds

SONET-Far-End-Line-Severely-Errored-Seconds

Description: Indicates the number of severely errored seconds at the far-end device's Line layer. A Synchronous Optical Network (SONET) line consists of one or more sections.

Usage: The SONET-Far-End-Line-Severely-Errored-Seconds value is read only.

Example: `sonet-far-end-line-severely-errored-seconds = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,SONET-Far-End-Line-Errored-Seconds,
SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations,
SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Severely-Errored-Seconds,
SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations,
SONET-Line-Errored-Seconds, SONET-Line-Severely-Errored-Seconds,
SONET-Line-Unavailable-Seconds, SONET-Path-Coding-Violations,
SONET-Path-Errored-Seconds, SONET-Path-Severely-Errored-Seconds,
SONET-Path-Unavailable-Seconds, SONET-Section-Coding-Violations,
SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds,
SONET-Section-Severely-Errored-Seconds

SONET-Far-End-Line-Unavailable-Seconds

Description: Indicates the number of unavailable seconds at the far-end device's Line layer. A Synchronous Optical Network (SONET) line consists of one or more sections.

Usage: The SONET-Far-End-Line-Unavailable-Seconds value is read only.

Example: `sonet-far-end-line-unavailable-seconds = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,SONET-Far-End-Line-Errored-Seconds,
SONET-Far-End-Line-Severely-Errored-Seconds,
SONET-Far-End-Path-Coding-Violations, SONET-Far-End-Path-Errored-Seconds,
SONET-Far-End-Path-Severely-Errored-Seconds,
SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations,
SONET-Line-Errored-Seconds, SONET-Line-Severely-Errored-Seconds,
SONET-Line-Unavailable-Seconds, SONET-Path-Coding-Violations,
SONET-Path-Errored-Seconds, SONET-Path-Severely-Errored-Seconds,
SONET-Path-Unavailable-Seconds, SONET-Section-Coding-Violations,

SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds, SONET-Section-Severely-Errored-Seconds

SONET-Far-End-Path-Coding-Violations

Description: Pertains to Synchronous Optical Network (SONET). Indicates the number of bit-interleaved parity errors at the far-end device's Path layer. A path is an end-to-end circuit.

Usage: The SONET-Far-End-Path-Coding-Violations value is read only.

Example: `sonet-far-end-path-coding-violations = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,SONET-Far-End-Line-Errored-Seconds, SONET-Far-End-Line-Severely-Errored-Seconds, SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Severely-Errored-Seconds, SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations, SONET-Line-Errored-Seconds, SONET-Line-Severely-Errored-Seconds, SONET-Line-Unavailable-Seconds, SONET-Path-Coding-Violations, SONET-Path-Errored-Seconds, SONET-Path-Severely-Errored-Seconds, SONET-Path-Unavailable-Seconds, SONET-Section-Coding-Violations, SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds, SONET-Section-Severely-Errored-Seconds

SONET-Far-End-Path-Errored-Seconds

Description: Pertains to Synchronous Optical Network (SONET). Indicates the number of errored seconds at the far-end device's Path layer. A path is an end-to-end circuit.

Usage: The SONET-Far-End-Path-Errored-Seconds value is read only.

Example: `sonet-far-end-path-errored-seconds = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,SONET-Far-End-Line-Errored-Seconds, SONET-Far-End-Line-Severely-Errored-Seconds, SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations, SONET-Far-End-Path-Severely-Errored-Seconds, SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations, SONET-Line-Errored-Seconds, SONET-Line-Severely-Errored-Seconds, SONET-Line-Unavailable-Seconds, SONET-Path-Coding-Violations, SONET-Path-Errored-Seconds, SONET-Path-Severely-Errored-Seconds, SONET-Path-Unavailable-Seconds, SONET-Section-Coding-Violations, SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds, SONET-Section-Severely-Errored-Seconds

SONET-Far-End-Path-Severely-Errored-Seconds

Description: Pertains to Synchronous Optical Network (SONET). Indicates the number of severely errored seconds at the far-end device's Path layer. A path is an end-to-end circuit.

Usage: The SONET-Far-End-Path-Severely-Errored-Seconds value is read only.

Example: sonet-far-end-path-severely-errored-seconds = 0

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,SONET-Far-End-Line-Errored-Seconds, SONET-Far-End-Line-Severely-Errored-Seconds, SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations, SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations, SONET-Line-Errored-Seconds, SONET-Line-Severely-Errored-Seconds, SONET-Line-Unavailable-Seconds, SONET-Path-Coding-Violations, SONET-Path-Errored-Seconds, SONET-Path-Severely-Errored-Seconds, SONET-Path-Unavailable-Seconds, SONET-Section-Coding-Violations, SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds, SONET-Section-Severely-Errored-Seconds

SONET-Far-End-Path-Unavailable-Seconds

Description: Pertains to Synchronous Optical Network (SONET). Indicates the number of unavailable seconds at the far-end device's Path layer. A path is an end-to-end circuit.

Usage: The SONET-Far-End-Path-Unavailable-Seconds value is read only.

Example: sonet-far-end-path-unavailable-seconds = 0

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,SONET-Far-End-Line-Errored-Seconds, SONET-Far-End-Line-Severely-Errored-Seconds, SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations, SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Severely-Errored-Seconds, SONET-Line-Coding-Violations, SONET-Line-Errored-Seconds, SONET-Line-Severely-Errored-Seconds, SONET-Line-Unavailable-Seconds, SONET-Path-Coding-Violations, SONET-Path-Errored-Seconds, SONET-Path-Severely-Errored-Seconds, SONET-Path-Unavailable-Seconds, SONET-Section-Coding-Violations, SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds, SONET-Section-Severely-Errored-Seconds

SONET-Line-Coding-Violations

Description: Indicates the number of bit-interleaved parity errors at the unit's Line layer. A Synchronous Optical Network (SONET) line consists of one or more sections.

Usage: The SONET-Line-Coding-Violations value is read only.

Example: `sonet-line-coding-violations = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,SONET-Far-End-Line-Errored-Seconds,
SONET-Far-End-Line-Severely-Errored-Seconds,
SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations,
SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Severely-Errored-Seconds,
SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Errored-Seconds,
SONET-Line-Severely-Errored-Seconds, SONET-Line-Unavailable-Seconds,
SONET-Path-Coding-Violations, SONET-Path-Errored-Seconds,
SONET-Path-Severely-Errored-Seconds, SONET-Path-Unavailable-Seconds,
SONET-Section-Coding-Violations,
SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds,
SONET-Section-Severely-Errored-Seconds

SONET-Line-Errored-Seconds

Description: Indicates the number of errored seconds at the unit's Line layer. A SONET line
consists of one or more sections.

Usage: The SONET-Line-Errored-Seconds value is read only.

Example: `sonet-line-errored-seconds = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,SONET-Far-End-Line-Errored-Seconds,
SONET-Far-End-Line-Severely-Errored-Seconds,
SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations,
SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Severely-Errored-Seconds,
SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations,
SONET-Line-Severely-Errored-Seconds, SONET-Line-Unavailable-Seconds,
SONET-Path-Coding-Violations, SONET-Path-Errored-Seconds,
SONET-Path-Severely-Errored-Seconds, SONET-Path-Unavailable-Seconds,
SONET-Section-Coding-Violations,
SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds,
SONET-Section-Severely-Errored-Seconds

SONET-Line-Severely-Errored-Seconds

Description: Indicates the number of severely errored seconds at the unit's Line layer. A
Synchronous Optical Network (SONET) line consists of one or more sections.

Usage: The SONET-Line-Severely-Errored-Seconds value is read only.

Example: `sonet-line-severely-errored-seconds = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,SONET-Far-End-Line-Errored-Seconds,
SONET-Far-End-Line-Severely-Errored-Seconds,
SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations,
SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Severely-Errored-Seconds,
SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations,
SONET-Line-Errored-Seconds, SONET-Line-Unavailable-Seconds,
SONET-Path-Coding-Violations, SONET-Path-Errored-Seconds,
SONET-Path-Severely-Errored-Seconds, SONET-Path-Unavailable-Seconds,
SONET-Section-Coding-Violations,
SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds,
SONET-Section-Severely-Errored-Seconds

SONET-Line-Unavailable-Seconds

Description: Indicates the number of unavailable seconds at the unit's Line layer. A
Synchronous Optical Network (SONET) line consists of one or more sections.

Usage: The SONET-Line-Unavailable-Seconds value is read only.

Example: `sonet-line-unavailable-seconds = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,SONET-Far-End-Line-Errored-Seconds,
SONET-Far-End-Line-Severely-Errored-Seconds,
SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations,
SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Severely-Errored-Seconds,
SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations,
SONET-Line-Errored-Seconds, SONET-Line-Severely-Errored-Seconds,
SONET-Path-Coding-Violations, SONET-Path-Errored-Seconds,
SONET-Path-Severely-Errored-Seconds, SONET-Path-Unavailable-Seconds,
SONET-Section-Coding-Violations,
SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds,
SONET-Section-Severely-Errored-Seconds

SONET-Path-Coding-Violations

Description: Pertains to Synchronous Optical Network (SONET). Indicates the number of
bit-interleaved parity errors at the unit's Path layer. A path is an end-to-end circuit.

Usage: The SONET-Path-Coding-Violations value is read only.

Example: `sonet-path-coding-violations = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,SONET-Far-End-Line-Errored-Seconds,
SONET-Far-End-Line-Severely-Errored-Seconds,
SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations,
SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Severely-Errored-Seconds,
SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations,

SONET-Line-Errored-Seconds, SONET-Line-Severely-Errored-Seconds, SONET-Line-Unavailable-Seconds, SONET-Path-Errored-Seconds, SONET-Path-Severely-Errored-Seconds, SONET-Path-Unavailable-Seconds, SONET-Section-Coding-Violations, SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds, SONET-Section-Severely-Errored-Seconds

SONET-Path-Errored-Seconds

Description: Pertains to Synchronous Optical Network (SONET). Indicates the number of errored seconds at the unit's Path layer. A path is an end-to-end circuit.

Usage: The SONET-Path-Errored-Seconds value is read only.

Example: `sonet-path-errored-seconds = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,SONET-Far-End-Line-Errored-Seconds, SONET-Far-End-Line-Severely-Errored-Seconds, SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations, SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Severely-Errored-Seconds, SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations, SONET-Line-Errored-Seconds, SONET-Line-Severely-Errored-Seconds, SONET-Line-Unavailable-Seconds, SONET-Path-Coding-Violations, SONET-Path-Severely-Errored-Seconds, SONET-Path-Unavailable-Seconds, SONET-Section-Coding-Violations, SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds, SONET-Section-Severely-Errored-Seconds

SONET-Path-Severely-Errored-Seconds

Description: Pertains to Synchronous Optical Network (SONET). Indicates the number of severely errored seconds at the unit's Path layer. A path is an end-to-end circuit.

Usage: The SONET-Path-Severely-Errored-Seconds value is read only.

Example: `sonet-path-severely-errored-seconds = 0`

Location: OC3-ATM-Stat {shelf-N trunk-module-N N} > Performance-Monitoring
OC3-ATM-Stat {shelf-N trunk-module-N N} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,SONET-Far-End-Line-Errored-Seconds, SONET-Far-End-Line-Severely-Errored-Seconds, SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations, SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Severely-Errored-Seconds, SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations, SONET-Line-Errored-Seconds, SONET-Line-Severely-Errored-Seconds, SONET-Line-Unavailable-Seconds, SONET-Path-Coding-Violations, SONET-Path-Errored-Seconds, SONET-Path-Unavailable-Seconds, SONET-Section-Coding-Violations,

SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds, SONET-Section-Severely-Errored-Seconds

SONET-Path-Unavailable-Seconds

Description: Pertains to Synchronous Optical Network (SONET). Indicates the number of unavailable seconds at the unit's Path layer. A path is an end-to-end circuit.

Usage: The SONET-Path-Unavailable-Seconds value is read only.

Example: `sonet-path-unavailable-seconds = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,SONET-Far-End-Line-Errored-Seconds, SONET-Far-End-Line-Severely-Errored-Seconds, SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations, SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Severely-Errored-Seconds, SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations, SONET-Line-Errored-Seconds, SONET-Line-Severely-Errored-Seconds, SONET-Line-Unavailable-Seconds, SONET-Path-Coding-Violations, SONET-Path-Errored-Seconds, SONET-Path-Severely-Errored-Seconds, SONET-Section-Coding-Violations, SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds, SONET-Section-Severely-Errored-Seconds

SONET-Section-Coding-Violations

Description: Indicates the number of bit-interleaved parity errors at the unit's Section layer. A Synchronous Optical Network (SONET) section is a single run of cable. Section-terminating equipment is any adjacent pair of switches.

Usage: The SONET-Section-Coding-Violations value is read only.

Example: `sonet-section-coding-violations = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,SONET-Far-End-Line-Errored-Seconds, SONET-Far-End-Line-Severely-Errored-Seconds, SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations, SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Severely-Errored-Seconds, SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations, SONET-Line-Errored-Seconds, SONET-Line-Severely-Errored-Seconds, SONET-Line-Unavailable-Seconds, SONET-Path-Coding-Violations, SONET-Path-Errored-Seconds, SONET-Path-Severely-Errored-Seconds, SONET-Path-Unavailable-Seconds, SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds, SONET-Section-Severely-Errored-Seconds

SONET-Section-Errored-Seconds

Description: Indicates the number of errored seconds at the unit's Section layer. A Synchronous Optical Network (SONET) section is a single run of cable. Section-terminating equipment is any adjacent pair of switches.

Usage: The SONET-Section-Errored-Seconds value is read only.

Example: `sonet-section-errored-seconds = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,SONET-Far-End-Line-Errored-Seconds, SONET-Far-End-Line-Severely-Errored-Seconds, SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations, SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Severely-Errored-Seconds, SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations, SONET-Line-Errored-Seconds, SONET-Line-Severely-Errored-Seconds, SONET-Line-Unavailable-Seconds, SONET-Path-Coding-Violations, SONET-Path-Errored-Seconds, SONET-Path-Severely-Errored-Seconds, SONET-Path-Unavailable-Seconds, SONET-Section-Coding-Violations, SONET-Section-Severely-Errored-Framing-Seconds, SONET-Section-Severely-Errored-Seconds

SONET-Section-Severely-Errored-Framing-Seconds

Description: Pertains to Synchronous Optical Network (SONET). Indicates the number of severely errored framing seconds at the unit's Section layer. A SONET section is a single run of cable. Section-terminating equipment is any adjacent pair of switches.

Usage: The SONET-Section-Severely-Errored-Framing-Seconds value is read only.

Example: `sonet-section-severely-errored-framing-seconds = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,SONET-Far-End-Line-Errored-Seconds, SONET-Far-End-Line-Severely-Errored-Seconds, SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations, SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Severely-Errored-Seconds, SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations, SONET-Line-Errored-Seconds, SONET-Line-Severely-Errored-Seconds, SONET-Line-Unavailable-Seconds, SONET-Path-Coding-Violations, SONET-Path-Errored-Seconds, SONET-Path-Severely-Errored-Seconds, SONET-Path-Unavailable-Seconds, SONET-Section-Coding-Violations, SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Seconds

SONET-Section-Severely-Errored-Seconds

Description: Indicates the number of severely errored seconds at the unit's Section layer. A Synchronous Optical Network (SONET) section is a single run of cable. Section-terminating equipment is any adjacent pair of switches.

Usage: The SONET-Section-Severely-Errored-Seconds value is read only.

Example: `sonet-section-severely-errored-seconds = 0`

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Performance-Monitoring
OC3-ATM-Stat {shelf-*N* trunk-module-*N N*} > Interval-Performance-Monitoring

See Also: SONET-Far-End-Line-Coding-Violations,SONET-Far-End-Line-Errored-Seconds, SONET-Far-End-Line-Severely-Errored-Seconds, SONET-Far-End-Line-Unavailable-Seconds, SONET-Far-End-Path-Coding-Violations, SONET-Far-End-Path-Errored-Seconds, SONET-Far-End-Path-Severely-Errored-Seconds, SONET-Far-End-Path-Unavailable-Seconds, SONET-Line-Coding-Violations, SONET-Line-Errored-Seconds, SONET-Line-Severely-Errored-Seconds, SONET-Line-Unavailable-Seconds, SONET-Path-Coding-Violations, SONET-Path-Errored-Seconds, SONET-Path-Severely-Errored-Seconds, SONET-Path-Unavailable-Seconds, SONET-Section-Coding-Violations, SONET-Section-Errored-Seconds, SONET-Section-Severely-Errored-Framing-Seconds,

Source-IP-Check

Description: Enables or disables antispoofing for the session.

Usage: Valid values are as follows:

- `Yes`—Specifies that the system checks all packets received on the interface to ensure that their source IP address matches the combination of address and subnet mask specified by the Remote-Address value, or the address agreed upon in IPCP negotiation. If Remote-Address specifies a subnet, packets that originate on that subnet are accepted. If Remote-Address specifies a 32-bit mask, only packets from that host are accepted. Packets sent from an address that does not match are discarded.

- `No`—Specifies that antispoofing for the session is disabled. This is the default.

Example: `set source-ip-check = yes`

Location: Connection *station* > IP-Options

See Also: IP-Address

Spared-Slot-Number

Description: Specifies the primary line interface module (LIM) associated with the spare LIM specified by Spare-Slot-Number.

Usage: The Spared-Slot-Number value is read only.

Example: `spared-slot-number = 2`

Location: LIM-Sparing-Status

See Also: Manually-Spared-Slot-Number, Sparing-Mode

Spare-Physical-Address

Description: Specifies the sparing peer of this trunk port. If the current port is the primary trunk port, the value identifies its spare (secondary) trunk port. If the current port is the secondary trunk, the value identifies the primary trunk port.

Usage: In the DS3-ATM or OC3-ATM profile, specify a complex value that includes the shelf number, slot number and item (port) number of the spare trunk port. To specify the values, include both spare-physical-address and the relevant subfield in each Set command. For example:

Example:
```
admin> read oc3-atm {1 trunk-module-1 1}
OC3-ATM/{ shelf-1 trunk-module-1 1 } read

admin> set spare-physical-address shelf=1

admin> set spare-physical-address slot=18

admin> set spare-physical-address item-number=1
```

Or, you can list Spare-Physical-Address and then set its values directly. For example:
```
admin> read oc3-atm {1 trunk-module-1 1}
OC3-ATM/{ shelf-1 trunk-module-1 1 } read

admin> list spare-physical-address
[in OC3-ATM/{shelf-1 trunk-module-2 1}:spare-physical-address]
shelf=any-shelf
slot=any-slot
item-number=0

admin> set shelf=1

admin> set slot=18

admin> set item-number=1
```

In the AL-DMT-Stat, OC3-ATM-Stat and the SDSL-Stat profiles, the Spare-Physical-Address value is read only.

Dependencies: Sparing-State must be set to Yes for Spare-Physical-Address to apply.

Location: AL-DMT -Stat { shelf-N slot-*N N* }, DS3-ATM {shelf-*N* slot-*N N*} > Line-Config, OC3-ATM {shelf-*N* trunk-module-*N N*}, OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}, SDSL -Stat { shelf-N slot-*N N* }

See Also: Sparing-State

Spare-Slot-Number

Description: Specifies or indicates the slot number containing the spare link interface module (LIM) and path selector module (PSM) or copper loop test (CLT) module.

Usage: In the LIM-Sparing-Config profile, specify an integer. The default is `any-slot`. The slot you specify must have a special backup LIM. In the LIM-Sparing-Status profile, the Spare-Slot-Number value is read only. This value is automatically set by the software when the Stinger unit powers up.

Example: `set spare-slot-number = 1`

Dependencies: Spare-Slot-Number does not apply if Sparing-Mode=Inactive.

Location: LIM-Sparing-Config, LIM-Sparing-Status

See Also: Manually-Spared-Slot-Number, Spare-Physical-Address

Spare-Slot-Type

Description: Type of spare line interface module (LIM) installed in the slot. For example, suppose a Stinger unit is configured with an asymmetric digital subscriber line (ADSL) LIM in slot 1 and a symmetric digital subscriber line (SDSL) LIM in slot 4. Slot 14 contains a spare SDSL LIM with a path selector module (PSM), and slot 16 contains a spare ADSL LIM also with a PSM.

Usage: Default is `none`. This value is automatically detected and set by the software when the Stinger unit powers up.

Example: `spare-slot-type = none`

Location: LIM-Sparing-Config { shelf-*N*, Slot-*N N* }

See Also: Manually-Spared-Slot-Number, Spare-Physical-Address

Sparing-Change-Counter

Description: Displays a read-only count of each sparing change, including primary to secondary, secondary to primary, and so on.

Usage: The counter is reset on power up of the Stinger unit.

Example: `sparing-change-counter = 3`

Location: AL-DMT -Stat {shelf-*N* slot-*N N*},
`HDSL2 -Stat` {shelf-*N* slot-*N N* }LIM-Sparing-Config, LIM-Sparing-Status,
SDSL -Stat { shelf-*N* slot-*N N* }

See Also: Spare-Slot-Number, Sparing-Change-Reason, Sparing-Change-Time

Sparing-Change-Reason

Description: Indicates how the sparing setup has been activated.

Usage: Valid values are

- `inactive`—Sparing is not currently activated on this LIM
- `manual`—The sparing setup has been manually activated
- `automatic`—The sparing setup has been automatically setup

Example: `sparing-reason = manual`

Location: AL-DMT -Stat {shelf-*N* slot-*N N*}, HDSL2-Stat {shelf-*N* slot-*N N*}, LIM-Sparing-Status, SDSL -Stat {shelf-*N* slot-*N N*}

See Also: Spare-Slot-Number, Sparing-Change-Counter, Sparing-Change-Time

Sparing-Change-Time

Description: Indicates the time that the last change in the sparing state occurred.

Usage: The Sparing-Change-Time value is a read-only display set by the system.

Example: `sparing-time = 0`

Location: AL-DMT -Stat {shelf-*N* slot-*N N*}, HDSL2-Stat {shelf-*N* slot-*N N*}, LIM-Sparing-Status, SDSL -Stat {shelf-*N* slot-*N N*}

See Also: Spare-Slot-Number, Sparing-Change-Counter, Sparing-Change-Time

Sparing-Mode

Description: Enables or disables sparing, and specifies the sparing mode to use.

Usage: Specify one of the following values:

- `manual`—Enables sparing.
- `inactive`—Disables LIM port sparing. This is the default.
- `automatic`—Activates automatic sparing for the port. The values of the error threshold parameters in the `auto-lim-sparing-config >lim-sparing-config [slot number]` profile are used.

Example: `set sparing-mode = manual`

Location: AL-DMT -Stat {shelf-*N* slot-*N N*}, DS3-ATM {shelf-*N* slot-*N N*} > Line-Config, HDSL2-Stat{shelf-*N* slot-*N N* }, LIM-Sparing-Config, LIM-Sparing-Status

See Also: Manually-Spared-Slot-Number, Spare-Physical-Address, Spare-Slot-Number

Sparing-State

Description: State of the sparing function. Specifies or indicates, depending upon the profile in which it occurs, whether the sparing function for the port is enabled or disabled.

Usage: Valid values are as follows:

- `sparing-none`—Redundancy is not enabled. This is the default.
- `primary-active`—Redundancy is enabled and the LIM slot is the primary (spare) LIM.
- `primary-inactive`—Redundancy is not enabled and the LIM slot is the primary (spare) LIM.
- `secondary-active`—Redundancy is enabled and the LIM slot is the secondary (spare) LIM, and the spare is inactive.
- `secondary-inactive`—Redundancy is enabled and the LIM slot is the secondary (spare) LIM, and the spare is active
- `not-applicable`—Indicates that LIM redundancy is not applicable to this module.

Note: In the DS3-ATM-Stat and OC3-ATM-Stat profiles, the Sparing-State value is read only.

Example: `sparing-state = sparing-none`

Location: DS3-ATM-Stat, OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}, HDSL2-Stat{shelf-*N* slot-*N N*} , SDSL2-Stat{shelf-*N* slot-*N N*}

See Also: Spare-Physical-Address

SPID

Description: *Not currently used.* Assigns a channel to a trunk group.

Usage: When this parameter becomes available, you will be able to specify a number from 2 to 9.

Split-Code-Dot-User-Enabled

Description: *Not currently used.* Enables/disables local splitting of passwords in Cache-Token. This feature permits the use of usernames longer than five characters, when using a typical four digit pin and a six digit ACE server token code.

Usage: When this parameter becomes available, you will be able to specify one of the following values:

- `Yes`—Specifies that local splitting of passwords in Cache-Tokenis enabled.
- `No`—Specifies that local splitting of passwords in Cache-Token is disabled. This is the default.

Example: set split-code-dot-user-enabled = yes

Location: Connection > PPP-Options

SPVC-ATM-Address

Description: Specifies the unique Asynchronous Transfer Mode (ATM) target address for each ATM interface in the system (each trunk port and LIM port).

Usage: The system assigns defaults, but you can override a default by configuring a parameters explicitly.

Example: `spvc-atm-address = 00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00+`

Location: ATM-SPVC-Addr-Config { { *N NN* 0 } 0 }

SPVC-Retry-Interval

Description: Specifies the number of seconds to wait before reattempting to establish the switched permanent virtual channel (SPVC) after a failed call attempt.

Usage: The valid range is from 0 to 3600, with a default of 10 seconds. A zero value indicates no retries.

Example: `spvc-retry-interval = 10`

Location: Connection > ATM-Options

SPVC-Retry-Limit

Description: Specifies the maximum number of consecutive failed call-setup attempts allowed.

Usage: The default zero value indicates no limit (the attempts will continue until the setup is successful). If you specify a nonzero value and the limit is reached, a management action (such as a switched permanent virtual channel (SPVC) restart via Simple Network Management Protocol (SNMP)) is required to reinitiate call setup attempts.

Example: `spvc-retry-limit = 0`

Location: Connection > ATM-Options

SPVC-Retry-Threshold

Description: Specifies the number of consecutive failed call-setup attempts allowed before the system increments its count of switched permanent virtual channel (SPVC) call failures, which can cause an alarm.

Usage: The valid range is from 0 to 65535, with a default of 1 failed call. A zero value specifes an infinite number of call attempts, which disables alarms for the SPVC.

Example: `spvc-retry-threshold = 1`

Location: Connection/ATM-Options

Stack-Trace

Description: Indicates the stack trace record created when an error occurred.

Usage: The Stack-Trace setting is read only. It consists of an array of six elements.

Example: stack-trace = [000000]

Location: Error

See Also: Index, IP-Address, IS-Post, Loadname, User-Profile

Standby-Upstream-Bandwidth-On-Trunks

Description: *Not currently used.* Indicates the total bandwidth of all standby trunks.

Usage: The Standby-Upstream-Bandwidth-On-Trunks value is read only.

Example: standby-upstream-bandwidth-on-trunks = 466620

Location: Bandwidth-Stats

See Also: Active-Upstream-Bandwidth-On-Trunks, Max-Upstream-Bandwidth

Start-With-Menus

Description: Specifies whether the terminal server presents a menu interface for an interactive user initiating a connection.

Usage: Valid values are as follows:

- Yes—Specifies that the terminal server starts user logins in menu mode.
- No—Specifies that the terminal server starts user logins in command mode. This is the default.

Example: set start-with-menus = yes

Dependencies: If terminal services are disabled, Start-With-Menus does not apply.

Location: Terminal-Server > Menu-Mode-Options

See Also: Menu-Mode-Options

State

Description: Pertains to Private Network-to-Network Interface (PNNI). Specifies the current state of advertising the summary address into the peer group.

Usage: Valid values are as follows:

- advertising—The summary address is being advertised into the peer group.
- suppressing—The advertisement is currently suppressed.
- inactive—This summary entry is inactive. This is the default.

Example: state = inactive

Location: PNNI-Summary-Addr *name*

Static-Pref

Description: Specifies the default preference given to static IP routes. When choosing the routes to put in the routing table, the router first compares their preference values, preferring the lowest number. If the preference values are equal, the router compares the metric values, using the route with the lowest metric.

Usage: Specify a number from 0 to 255. A value of 255 prevents the use of the route. Following are the default preferences for different types of routes:

- 0 (zero)—Connected routes
- 30—Routes learned from ICMP redirects
- 100—Routes learned from RIP
- 100—Static routes

Example: set static-pref = 50

Location: IP-Global

See Also: Down-Preference, Preference, RIP-Pref

Station

Description: In a Connection profile, specifies the name of the CPE or remote device on the inbound side of the circuit. In the Admin-State-Perm-If profile, indicates the name of a nailed-up or Frame Relay connection indicated by a Connection profile or RADIUS user profile. In an SPVC Connection profile, specifies the name of the CPE device followed by a number such as `ray-dsl-1`.

Usage: In a Connection profile, specify the name of the remote station. You can enter up to 31 characters. The value you specify is case sensitive, and must exactly match the name of the remote device. If you are not sure about the exact name, contact the administrator of the remote network. The default is null. In the Admin-State-Perm-If profile, the Station setting is read only.

Example: set station = robin-gw

Dependencies: The name you specify for Station is not necessarily a DNS hostname. The Stinger unit does not use the Station name to obtain an IP address.

Location: Admin-State-Perm-If, Connection

See Also: Index, Name

Status-Length

Description: Specifies the number of lines displayed in the status window, including dividing lines. (For a new value to take effect, the user must log in again.)

Usage: Specify a number from 18 to 993. The default is 18 lines.

Example: set status-length = 60

Dependencies: Status-Length must be less than Screen-Length by at least six lines.

Location: User

See Also: Left-Status, Screen-Length, Top-Status

Stngr-32-IDSL

Description: Specifies whether code images for 32 Port IDSL modules should be stored in Flash memory.

Usage: Valid values are as follows:

- `Auto`—Load code image if there is a card installed of that type. Otherwise, skip it. This is the default.
- `Load`—Load code image when present in tar file.
- `Skip`—Skip code image when present in tar file.

Example: set stngr-32-idsl = auto

Location: Load-Select

See Also: 48-DMT-ADSL

Sub-Persistence

Description: Specifies the number of seconds that Average Line Utilization (ALU) must persist below the Target-Utilization threshold before the Stinger unit subtracts bandwidth from the connection. When subtracting bandwidth, the unit removes the number of channels specified by Decrement-Channel-Count. However, it does not clear the base channel of the call, nor does it cause the number of channels to fall below the Minimum-Channels value.

Usage: Specify an integer from 1 to 300. The default is 10.

Example: set sub-persistence = 15

Dependencies: Sub-Persistence has little effect when the Seconds-History value is high.

Location: Answer-Defaults > MPP-Answer, Connection station > MPP-Options

See Also: Add-Persistence, Bandwidth-Monitor-Direction, Base-Channel-Count, Decrement-Channel-Count, Target-Utilization

Subsc-Atm-Address

Description: *Not currently used.* The SVC prefix is used on the user-network interface (not currently supported) to specify the ATM address prefix to the end system across the interface.

Location: ATM-If-Config { { *N NN N* } *N* } > Base-Config

Substitute-Recv-Name

Description: *Not currently used.* Name expected from the far end used during a bidirectional authentication.

Usage: If `substitute-recv-name` is null, the profile name is used. This parameter is used only for outgoing calls. When this parameter becomes available, you will be able to specify a text field of up to 23 characters.

Example: `set substitute-recv-name = alois`

Location: Connection > PPP-Options

See Also: Recv-Password, Send-Password, Substitute-Send-Name

Substitute-Send-Name

Description: *Not currently used.* Specifies the name to send to the far end, if different from the global system name.

Usage: When this parameter becomes available, you will be able to specify a text field of up to 23 characters.

Example: `set substitute-send-name = alternate-name1`

Location: Connection > PPP-Options

See Also: Recv-Password, Substitute-Recv-Name

Summarize-RIP-Routes

Description: Specifies whether the Stinger unit summarizes RIP-v1 subnet information when advertising routes.

If the Stinger unit summarizes Routing Information Protocol (RIP) routes, it advertises one route to all the subnets of the same class in the same network. For example, it advertises the route to 200.5.8.13/28 (a class C address) as a route to 200.5.8.0. When the Stinger unit does not summarize information, it advertises each route as it appears in its routing table. For the route to 200.5.8.13/28, the Stinger unit advertises a route to 200.5.8.13.

Usage: Valid values are as follows:
- `Yes`—Specifies that the Stinger unit summarizes RIP-v1 subnet information. This is the default.
- `No`—Specifies that the Stinger unit advertises each route as it appears in the routing table.

Example: `set summarize-rip-routes = no`

Dependencies: The Summarize-RIP-Routes setting is not applicable if RIP-v2 is in use or if RIP is turned off.

Location: IP-Global

See Also: RIP, RIP-Policy, RIP-Pref

Suppress

Description: Specifies whether the summary address will be advertised (propagated into the peer group) or suppressed.

Usage: The default value of `false` specifies that the summary address is propagated. If you set the parameter to `true`, the unit suppresses the advertisement of addresses that match the prefix.

Example: `suppress = false`

Location: PNNI-Summary-Addr

See Also: Addr-Index, State

Suppress-Host-Routes

Description: Specifies whether the Stinger unit advertises host routes in each update, which can cause excessive routing overhead:

Usage: Valid values are as follows:

- `Yes`—Specifies that host routes are suppressed.
- `No`—Specifies that host routes are advertised. This is the default.

Example: The following set of commands configures the Stinger unit to suppress host routes:

```
admin> read ip-global
IP-GLOBAL read
admin> set suppress-host-routes = yes
admin> write
IP-GLOBAL written
```

Dependencies: If you set Suppress-Host-Routes to Yes, routes are suppressed according to the following rules:

- If a Connection profile specifies a Remote-Address setting with a subnet mask of less than 32 bits, host routes for the interface are suppressed while the session is being negotiated. After the session is established, only network routes are advertised for the interface.
- If a Connection profile specifies a Remote-Address setting with a subnet mask of /32, host routes for the interface are not suppressed.

Location: IP-Global

Suspect-Access-Resource-Enabled

Description: Specifies whether the suspect-access-resource trap is enabled.

Usage: Valid values are as follows:

- `Yes`—Specifies that the suspect-access-resource trap is enabled. This is the default.
- `No`—Specifies that the suspect-access-resource trap is disabled.

Example: `set suspect-access-resource-enabled = no`

Location: Trap *name*

See Also: Sys-Clock-Drift-Enabled

Sustainable-Cell-Rate-Cells-Per-Sec

Description: Indicates the sustainable cell rate (SCR), which is the average cell transmission rate allowed over a given period of time on a given circuit.

Usage: The value is read-only. It is calculated from the Sustainable-Rate-Kbits-Per-Sec setting and used in the internal ATM configuration. Valid range is from zero (0) to 2147483647.

Example: `sustainable-cell-rate-cells-per-sec = 37`

Location: ATM-QOS

See Also: Cell-Delay-Variation-Tolerance, Peak-Cell-Rate-Cells-Per-Sec, Sustainable-Rate-Kbits-Per-Sec

Sustainable-Rate-Kbits-Per-Sec

Description: Indicates the sustainable bit rate in kilobits per second.

Usage: This setting applies only to VBR traffic, for which the bit rate is variable within the values specified for peak cell rate (PCR), sustainable cell rate (SCR), and maximum burst size (MBS).The default value is 16 Kbps. The range is from 0 to 155520 Kbps

Example: `sustainable-rate-kbits-per-sec = 16`

Location: ATM-QOS

See Also: Cell-Delay-Variation-Tolerance, Peak-Cell-Rate-Cells-Per-Sec, Sustainable-Cell-Rate-Cells-Per-Sec

Switched-Call-Type

Description: Specifies the type of bearer-channel capability the Stinger unit sets up for each switched call in a session.

Usage: Valid values are as follows:

Values	Specifies
Voice	The Stinger unit sets up a voice call, even though the it will transmit data over the channel. The Voice setting assumes that only 56 Kbps is available.
56K-Restricted (the default)	The Stinger unit sets up a data call with an explicit request for 56-Kbps restricted data transfer. Data is transmitted to meet the density requirements for AMI-encoded T1 lines. These requirements dictate that you cannot transmit 16 consecutive zeroes. Use this setting only for a connection that uses robbed-bit signaling.
56K-Clear	The Stinger unit sets up a data call that uses 56 Kbps of the data channel. 56K-Clear is a common setting for T1 PRI lines.
64K-Restricted	The Stinger unit sets up a data call with an explicit request for 64-Kbps restricted data transfer. The call should be set up as a data call at a rate of 64 Kbps on an AMI-encoded line. With each transmission, a binary 1 is inserted in the least significant bit position.
64K-Clear	The Stinger unit sets up a data call that uses the full 64-Kbps bandwidth of the data channel.
144K-Clear	The Stinger unit sets up a data call that utilizes the full 144 Kbps of combined 2B+D data channels.
384K-Restricted	The Stinger unit sets up a data call that connects to Multi-Rate or GlobanD data services at 384 Kbps.
384K-Clear	The Stinger unit sets up a data call that connects to the Switched-384 data service. This AT&T data service does not require Multi-Rate or GlobanD.
DWS-384-Clear	A 384-Kbps call coded as Multi-Rate, not H0.
1536K-Clear	The Stinger unit sets up a data call that connects to the Switched-1536 data service at 1536 Kbps. NFAS signaling is required for the Switched-1536 data service. (Because all 24 channels of the T1 PRI line carry user data, the D channel must be on another line.)
1536K-Restricted	The same service as 1536K-Clear, but with a request for restricted data transfer. With each transmission, a binary 1 is inserted in the least significant bit position.
128K-Clear to 1472K-Clear (in multiples of 64)	Multi-Rate bit rates.
Modem	The Stinger unit sets up the call as a voice call. When the call is up, the Stinger unit routes it to a digital modem.

You must set this parameter for the userstat command to display the correct speed setting.

Example: **`set switched-call-type = 56k-clear`**

Dependencies: To ensure data integrity:

• Use only digital end-to-end connectivity. No analog signals should be present anywhere in the link.

• Make sure that the phone company is not using any intervening loss plans to economize on voice calls.

• Do not use echo cancellation. The technology designed to remove echoes from analog lines can scramble data in the link.

• Do not make any modifications that can change the data in the link.

If a nailed-up connection is in use, Switched-Call-Type does not apply.

Location: Frame-Relay *fr-name*

See Also: Data-Service

Switched-Enabled

Description: Indicates whether the unit can make switched calls.

Usage: The Switched-Enabled setting is read only. Yes indicates that the unit can make switched calls. No indicates that the unit can use only nailed-up links.

Example: switched-enabled = yes

Location: Base

See Also: Data-Call-Enabled, D-Channel-Enabled, Multi-Rate-Enabled, R2-Signaling-Enabled

Sys-Clock-Drift-Enabled

Description: Specifies whether the SNMP clock-drifted trap is enabled.

Usage: Valid values are as follows:

• Yes—Specifies that the SNMP clock-drifted trap is enabled. This is the default.

• No—Specifies that the SNMP clock-drifted trap is disabled.

Example: `set sys-clock-drift-enabled = no`

Location: Trap *name*

See Also: Config-Change-Enabled

Syslog-Enabled

Description: Enables or disables forwarding of log messages to the UNIX Syslog server.

Usage: Valid values are as follows:

- Yes—Specifies forwarding of log messages to the UNIX Syslog server is enabled.
- No—Specifies forwarding of log messages to the UNIX Syslog server is disabled. This is the default.

Example: `set syslog-enabled = yes`

Dependencies: Syslog is not a Stinger unit status display, but a facility that sends system status messages to a host computer, known as the Syslog host. (For information about the syslog daemon, see the UNIX man pages for logger(1), syslog(3), syslog.conf(5), and syslogd(8).) The Syslog function requires UDP port 514.

Location: Log

See Also: Facility, Host

Syslog-Level

Description: Specifies the lowest level of log messages Stinger unit sends to the Syslog server.

Usage: All levels above the level you indicate will be included in your syslog messages. For example, if Alert is specified, messages at Emergency level and messages at Alert level will be included. Specify one of the following values:

Value	Lowest-level message indicates
none	The unit does not display log messages.
emergency	The unit has an error condition and is unlikely to be operating normally.
alert	The unit has an error condition but is still operating normally.
critical	An interface has gone down or a security error has occurred.
error	An error event has occurred.
warning	An unusual event has occurred, but the unit is otherwise operating normally. For example, this type of message appears when a login attempt has failed because the user entered an incorrect username or password.
notice	Events of interest in normal operation have occurred (a link going up or down, for example).
info (the default)	State and status changes that are commonly not of general interest have occurred.
debug	Helpful debugging information.

By default, Syslog records with a level of Debug are filtered out, and records with a level of Info or above are transmitted to the Syslog server.

Example: `set syslog-level = notice`

Dependencies: The Syslog-Level value in the Log profile affects all data streams. The Syslog-Level value in each Auxiliary-Syslog subprofile affects the individual data stream directed to the device specified by the Host value, and overrides the value in the Log profile.

Location: Log, Log > Auxiliary-Syslog > Auxiliary-Syslog *N*

See Also: Syslog-Enabled

System (profile)

Description: A profile that contains system-wide settings for call management.

Usage: Use the Read and List commands to make System the working profile and list its contents. For example:

```
admin> read system
SYSTEM read

admin> list
[in SYSTEM]
name=test-227
system-rmt-mgmt=yes
use-trunk-groups=yes
idle-logout=0
parallel-dialing=2
single-file-incoming=yes
analog-encoding=u-law
sessionid-base=0
shelf-controller-type=standalone
perm-conn-upd-mode=all
userstat-format=%i %l %s %r %d %a %u %c %t %n
boot-sr-version=2.1
system-8k-clock=controller
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
SYSTEM written
```

See Also: Beta-IMA-Value, Delta-Cell-Delin-Value, Gamma-IMA-Value, Boot-SR-Version, Idle-Logout, Name, Parallel-Dialing, Perm-Conn-Upd-Mode, Ses-Rate-Mode, Single-File-Incoming, System-8K-Clock, System-Rmt-Mgmt, Userstat-Format, Use-Trunk-Groups

System-8K-Clock

Description: Specifies the 8 kilohertz (kHz) clock source for the unit.

Usage: Valid values are as follows:

- `Controller`—Specifies that the clock source is the control module (CM). This is the default..

- `Trunk-Module`—Specifies that the clock source is the Trunk Module (TM) framer.
- `bits` (Building Interoffice Timing Source)—Specifies that the clock source is the T1 framer.

Example: `set system-8k-clock = trunk-module`

Location: System

System-Integrity (profile)

Description: Use this profile to set parameter for monitoring system integrity.

Usage: Use the Read and List commands to make System-Integrity the current profile, as in the following example, which includes a listing of the subprofile Integrity-Config:

Example:
```
default> read system-integrity
SYSTEM-INTEGRITY read
default> list
[in SYSTEM-INTEGRITY]
integrity-config = [ { no 100 yes 5 yes 600000 } { no 100 yes 5 yes
600000 } { +
enable-centralized-detection = no
ratio-centralized-detection = 5
default> list integrity-c 1
[in SYSTEM-INTEGRITY:integrity-config[1]]
enable-continuous-detection = no
detection-interval = 100
only-one-correction = yes
correction-factor = 5
auto-correction-enable = yes
interval-auto-correction = 600000
```

System-IP-Addr

Description: Specifies the source address for IP traffic originating from the Stinger unit.

The system IP address is an area of memory that contains the address of one of the Ethernet interfaces of the Stinger unit. By default, the system IP address is the IP address assigned to the shelf-controller Ethernet interface, and the source address for outgoing IP traffic is the address of the interface on which the Stinger unit transmits a packet. The system IP address is the default address used by the unit during IPCP negotiations with a caller.

Usage: Specify an IP address. The default is 0.0.0.0.

Example: `set system-ip-addr = 10.2.3.4`

Dependencies: If the System-IP-Addr becomes unreachable because of a topology change in the network, you can still use Telnet to reach any of the unit's interface addresses. The following algorithm determines the source address of packets from the Stinger unit:

1 The source address of IP-routing protocol packets is always the local address of the transmitting interface.

2   For incoming Telnet sessions, the source address of transmitted packets is the destination address of the originating TCP SYN packet.

3   If the IP-Global profile setting for System-IP-Addr is nonzero, all other transmitted packets have System-IP-Addr as the source address.

4   If the IP-Global profile setting for System-Ip-Addr is zero, the source address of all other transmitted packets is the local address of the transmitting interfaces.

Protocols that follow this algorithm include:

*   TCP: Defender, Rlogin, Telnet

*   UDP: Ascend Password Protocol (APP), DNS, RADIUS accounting, RADIUS authentication, SECURID, SNMP, Syslog, TFTP, Traceroute

Location: IP-Global

See Also: IP-Address, Local-Address, Remote-Address

System-Password

Description: Specifies a password for access to the terminal server.

Usage: Specify a password of up to 20 characters. The password is case sensitive. The default is null.

Example: `set system-password = mypw`

Dependencies: If terminal services are disabled, System-Password does not apply. If Security-Mode=None, the terminal server does not require a password.

Location: Terminal-Server > Terminal-Mode-Configuration

See Also: Password, Security-Mode, Telnet-Password, Terminal-Mode-Configuration

System-Rmt-Mgmt

Description: Enables or disables remote management of the Stinger unit across multichannel calls.

Usage: Valid values are as follows:

*   `Yes`—Specifies that remote management of the Stinger unit across multichannel calls is eanbled This is the default. .

*   `No`—Specifies that remote management of the Stinger unit across multichannel calls is disabled.

Example: `set system-rmt-mgmt = no`

Location: System

See Also: Remote-Configuration

T

T1000

Description: *Not currently used.* Specifies whether code images for STNGR_T1000 cards should be stored in Flash memory.

Usage: Valid values are as follows:

- `auto`—Load code image if there is a card installed of that type. Otherwise, skip it. This is the default.
- `load`—Load code image when present in tar file
- `skip`—Skip code image when present in tar file

Example: `set t1000  =  auto`

Location: Load-Select

See Also: 48-DMT-ADSL

T301-Ms

Description: Specifies the maximum amount of time (in milliseconds) that the Stinger unit waits for a response after an alert message is sent. The timer is stopped if a Release Complete or Release message is received before a Connect message, and the call is cleared.

Usage: Specify avalue from1 to 180000. The default value is 180000 (three minutes).

Example: `set t301-ms = 170000`

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T303-Ms

Description: Specifies the maximum amount of time (in milliseconds) that the Stinger unit waits for a response after an alert message is sent. The timer is stopped when a Connect, Call Proceeding, or Release Complete message is received.

Usage: Specify a value from from 500 to 5000. The default value is 4000.

Example: `set t303-ms = 5000`

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T303-Num-Retries

Description: Specifies the number of retries for the timer set by the T303-Ms parameter. For each retry, the timer resets and waits for a response until the combined specifications of interval and retries expire or the response is received, whichever comes first.

Usage: Specify a number from 1 to 4.

Example: T303-Num-Retries = 0

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T306-Ms

Description: Specifies the maximum amount of time (in milliseconds) that the Stinger unit waits for a response after a Release message is sent with progress indicator No. 8 for inband information. The timer is stopped when a Release Complete message is received.

Usage: The default value is 30000.

Example: `t306-ms = 30000`

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T308-Ms

Description: Specifies the maximum amount of time (in milliseconds) that the Stinger unit waits for a response after a Release message is sent. This timer is also called the release indication timer. The timer is started when the Release message is sent and normally is stopped when the Release or Release Complete message is received.

Usage: Specify a value from 5000 to 50000. The default value is 30000.

Example: `t308-ms = 30000`

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T308-Num-Retries

Description: Specifies the number of retries for the timer set by the T308-Ms parameter. For each retry, the timer resets and waits for a response until the combined specifications of interval and retries expire or the response is received, whichever comes first

Usage: Specify a number from 1 to 4.

Example: `T308-num replies = 0`

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T309-Ms

Description: Specifies the maximum amount of time (in milliseconds) that the Stinger unit waits to reconnect Q.SAAL. Signaling ATM adaptation layer (SAAL) resides between the atm layer and the Q.2931 function, providing reliable transport of Q.2931 messages. After the specifiedtime has elapsed, calls are dropped.

Usage: When this paramater is set to 0 (the default), a default value based an ATM signaling protocol is used. Specify a value from 0 to 200000.

Example: `set t309-ms = 10000`

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T310-Ms

Description: Specifies the maximum amount of time (in milliseconds) that the Stinger unit waitsfor a response after a Setup message is received. This timer is also called the call proceeding timer.

Usage: Specify a value from 5000 to 50000. The default value is 4000.

Example: `set t310-ms = 10000`

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T313-Ms

Description: Specifies the maximum amount of time (in milliseconds) that the Stinger unit waits for a response after a Connect message is sent. This timer is also called the connect request timer. The timer is started when the Connect message is sent and is stopped when the Connect Acknowledge message is received.

Usage: Valid values are from 1000 to 10000. The default value is 4000.

Example: `set t313-ms = 30000`

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T316-Ms

Description: Specifies the maximum amount of time (in milliseconds) that the Stinger unit waits for a response after a Restart message is sent. This timer is also called the restart request timer. The timer is started when the Restart message is sent and is stopped when the Restart Acknowledge message is received.

Usage: Specify a value from 10000 to 300000. The default value is 120000.

Example: `set t316-ms = 110000`

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T316-Num-Retries

Description: Specifies the number of retries for the timer set by the T316-Ms parameter. For each retry, the timer resets and waits for a response until the combined specifications of interval and retries expire or the response is received, whichever comes first.

Usage: Specify a number from 1 to 4.

Example: `T316-Num-Retries = 0`

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T317-Ms

Description: Specifies the maximum amount of time (in milliseconds) that the Stinger unit waits before completing the internal clearing following receipt of a Restart message.The timer is stopped when a Restart Acknowledge message is transmitted to the originator.

Usage: Specify a value from 10000 to 100000. The default value is 60000.

Example: `t317-ms = 60000`

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T322-Ms

Description: Specifies the maximum amount of time (in milliseconds) that the Stinger unit waits for a response after a Status Enq message is sent.

Usage: Specify a value from 1000 to 10000. The default value is 4000.

Example: `t322-ms = 4000`

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T322-Num-Retries

Description: Specifies the number of retries for the timer set by the T322-Ms parameter. For each retry, the timer resets and waits for a response until the combined specifications of interval and retries expire or the response is received, whichever comes first.

Usage: Specify a number from 1 to 4.

Example: `set T322-Num-Retries= 10`

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T331-Ms

Description: Specifies the maximum amount of time (in milliseconds) that the Stinger unit waits before internally clearing call references.

Usage: Valid values are from 1000 to 10000.

Example: `set t331-ms = 60000`

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T331-Num-Retries

Description: Specifies the number of retries for the timer set by the T331-Ms parameter. For each retry, the timer resets and waits for a response until the combined specifications of interval and retries expire or the response is received, whichever comes first.

Usage: Specify a number from 1 to 4.

Example: `set T331-Num-Retries = 6`

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T333-Ms

Description: Specifies the maximum amount of time (in milliseconds) that the Stinger unit waits before internally clearing call references.

Usage: Specify a value from 1000 to 10000.

Example: `set t333-ms = 2000`

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T391-Val

Description: Specifies the setting for the link Integrity Verification polling timer in Frame Relay.

Usage: The value should be less than that of T392-Val. The default is 10, which specifies that status requests are spaced 10 seconds apart. You can multiply the value by the number of polling cycles specified by N391-Val to calculate the interval at which the user network interface data terminal equipment (UNI-DTE) device requests a full status report.

Example: set t391-val = 2

Dependencies: If Link-Type = DCE, this parameter does not apply.

Location: Frame-Relay > *Name*

See Also: Call-By-Call, Link-Mgmt, Link-Type, MFR-Bundle-Name, Switched-Call-Type

T392-Val

Description: Specifies the T392-Val interval (in seconds) at which Status Enquiry messages should be received. If the network does not receive a Status Enquiry message within the specified number of seconds, the network records an error.

Usage: The default value is 15.

Example: n392-val = 3

Dependencies: If Link-Type is data terminal equipment (DTE), this parameter does not apply

Location: Frame-Relay > *Name*

See Also: Call-By-Call-Id, Link-Mgmt, Link-Type, Mfr-Bundle-Name, Switched-Call-Type

T397-Ms

Description: Specifies the maximum amount of time (in milliseconds) that the Stinger unit waits before internally clearing call references.

Usage: Specify a value from 1000 to 10000.

Example: set t397-ms = 1800

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T398-Ms

Description: Specifies the maximum amount of time (in milliseconds) that the Stinger unit waits for a response to a Drop Party message that was sent.

Usage: Specify a value from 1000 to10000. The default value is 4000.

Example: t398-ms = 4000

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries

T399-Ms

Description: Specifies the maximum amount of time (in milliseconds) that the Stinger unit waits for a response to an Add Party message that was sent.

Usage: Specify a value from 10000 to 20000.

Example: t399-ms = 14000

Location: ATM-If-Sig-Params *N* > Q2931-Options

See Also: Assign-VPI-VCI, Max-Restart, Max-Statenq, Saal-Retry-Ms, T303-Num-Retries, T313-Ms

Table-Config

Description: A subprofile that configures the dns local table, storing up to 8 host names & initial IP addresses.

Usage: Use the Read and List commands to list the IP-Global profile and the Dns-Local-Table and Table-Config subprofiles as in this example.

```
admin> list table-c 1
[in IP-GLOBAL:dns-local-table:table-config[1]]
host-name = ""
ip-address = 0.0.0.0
```

Location: IP-GLOBAL > dns-local-table > table-config

See Also: Host-Name, IP-Address

Tac-Auth-Client

Description: A subprofile that defines how the Stinger unit interacts as a client of Terminal Access Controller Access Control System (TACACS) authentication servers.

Usage: With External-Auth as the working profile, list the Tac-Auth-Client subprofile. You can then use the Set command to modify the settings in the subprofile. To close the profile and return to a higher context in the working profile, enter the List command, followed by a space and two periods.

Example: To list the Tac-Auth-Client subprofile:

```
admin> list tac-auth-client

[in EXTERNAL-AUTH:tac-auth-client]
auth-server-1 = 0.0.0.0
auth-server-2 = 0.0.0.0
auth-server-3 = 0.0.0.0
auth-port = 0
auth-src-port = 0
```

```
auth-key = ""
auth-timeout = 0
```

To close the subprofile and return to a higher context in the working profile, enter the List command followed by two periods:

```
admin> list ..
```

Location: External-Auth

See Also: Auth-Key, Auth-Server-N, Auth-Src-Port, Auth-Timeout

TACP-TX-Cell-Count

Description: Pertains to Asynchronous Transfer Mode (ATM). Indicates the Transmit ATM Cell Processor (TACP) transmit cell count.

Usage: The TACP-TX-Cell-Count value is read only.

Example: TACP-TX-Cell-Count = 0

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: RACP-Rx-Cell-Count

Tag

Description: Pertains to Simple Network Management Protocol (SNMP). Specifies a value that links the SNMPv3-Notification profile with the Trap profile specifying the host address to which notification messages are sent.

Usage: Specify up to 255 characters. The default is null.

Example: set tag = newtag

Location: SNMPv3-Notification *name*

See Also: Active-Enabled, Host-Port, Msg-Proc-Model, Notify-Tag-List, Security-Level, Security-Model, Security-Name, Target-Params-Name

Tag-or-Discard

Description: Enables/disables tagging of cells that do not conform to the sustainable cell rate (SCR) part of the traffic contract. Tagging means changing the cell loss priority (CLP) bit to 1. Cells not conforming to program clock reference (PCR) are discarded. The default is discard.

Usage: Valid values are as follows:

- tag—enable tagging
- discard—Disable tagging. This is the default.

Example: tag-or-discard = discard

Location: ATM-QOS

See Also: Early-Packet-Discard, Partial-Packet-Discard

Target-ATM-Address

Description: Specifies the ATM address of the destination port on which the target switch establishes the target PVC to the destination end system.

Example: The value can be a 40-digit hexadecimal number or an alias that has been defined to represent the number. For details about aliases, see the *Stinger ATM Configuration Guide*.

Example: `target-atm-address =`
`00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00+`

Dependencies: Target-ATM-address does not apply if the Conn-Kind value is pvc.

Location: Connection *name* > Atm-Connect-Options

Target-Noise-Margin-Down

Description: Specifies the downstream noise margin the line must achieve relative to 0 dB to initialize successfully and to rate adapt during normal operations.

Usage: Specify an integer from 1 to 31 representing decibels. The default is 6 dB for 12- and 24-port LIMs and 4 dB for 48-port LIMs. The modem software limits the maximum noise margin to 15 dB. If you specify a setting greater than 15, the modem software uses 15 dB.

Example: `set target-noise-margin-down = 15`

Location: AL-DMT {shelf-*N* slot-*N N*} > Margin-Config

See Also: Target-Noise-Margin-Up

Target-Noise-Margin-Up

Description: Specifies the upstream noise margin the line must achieve relative to 0 dB to initialize successfully and to rate adapt during normal operations.

Usage: Specify an integer from 1 to 31 representing decibels. The default is 6 db for 12- and 24-port LIMs and 4 db for 48-port LIMs. The modem software limits the maximum noise margin to 15 dB. If you specify a setting greater than 15, the modem software uses 15 dB.

Example: `set target-noise-margin-up = 15`

Location: AL-DMT {shelf-*N* slot-*N N*} > Margin-Config

See Also: Target-Noise-Margin-Down

Target-Params-Name

Description: Specifies the value indicated by the Name setting in the SNMPv3-Target-Param profile.

Usage: Specify up to 22 characters.

Example: `set target-params-name = profile1`

Location: Trap *name*

See Also: Active-Enabled, Host-Port, Msg-Proc-Model, Notify-Tag-List, Security-Level, Security-Model, Security-Name,Tag

Target-Select

Description: Specifies the method of assigning the virtual path identifier-virtual channel identifier (VPI-VCI) pair for the target permanent virtual channel (PVC).

Usage: Valid values are as follows:

- `required`—Specifies that the target switch builds a read-only Connection profile using the VPI-VCI pair specified by the Target-VPI and Target-VCI settings, which are provided by the initiator switch during the signaling setup. This is the default.
- `any`—Specifies that the target switch provides the VPI-VCI pair to the SPVC, and the Target-VPI and Target-VCI settings on the SPVC initiator do not apply.

Example: `target-select = required`

Location: Connection *name*

See Also: Target-VCI, Target-VPI

Target-Utilization

Description: Specifies a number representing the percentage of line utilization to use as a threshold for determining when to add or subtract bandwidth. The Stinger unitadds bandwidth when average line utilization (ALU) exceeds the Target-Utilization value, and subtracts bandwidth when it falls below that value for a specified amount of time.

Usage: Specify a number from 0 to 100. The default is 70.

Example: `target-utilization = 70`

Location: Answer-Defaults > MPP-Answer, Connection station > MP-Options

See Also: Add-Persistence, Bandwidth-Monitor-Direction, Base-Channel-Count, Decrement-Channel-Count, Seconds-History, Summarize-RIP-Routes

Target-VCI

Description: Specifies the virtual channel identifier (VCI) for the target permanent virtual channel (PVC), when Target-Select is set to `required`.

Usage: Specify a number to be assigned to the target PVC. The default value is 0 (zero)

Example: `target-vci = 0`

Location: Connection *name*

See Also: Target-Select,Target-VPI

Target-VPI

Description: Specifies the virtual path indicator (VPI) for the target permanent virtual channel (PVC), when Target-Select is set to `required`.

Usage: Specify a number to be assigned to the target PVC. The default value is 0 (zero)

Example: `target-vpi = 0`

Location: Connection *name*

See Also: Target-Select,Target-VCI

Tcc-Ms

Description: Specifies the time (in milliseconds) for control protocol data units (PDUs) (BGN, END, RESYNC).

Usage: Valid values are from zero (0) to 3000. The default value is 1000.

Example: `tcc-ms = 1000`

Location: ATM-If-Sig-Params *N* > Qsaal-Options

See Also: Tidle-Ms

TCP

Description: Pertains to Transmission Control Protocol (TCP). Enables or disables the TCP command from the terminal-server interface.

Usage: Valid values are as follows:

- `Yes`—Enables a user to initiate a TCP session from the terminal server.
- `No`—Prevents a user from initiating a TCP session from the terminal server. This is the default.

Example: set tcp = yes

Dependencies: If terminal services are disabled, TCP does not apply.

Location: Terminal-Server > Terminal-Mode-Configuration

See Also: Ping, SLIP, Telnet, Terminal-Mode-Configuration, Traceroute

TCP-Clear-Options

Description: A subprofile for configuring Transmission Control Protocol (TCP) in the Connection Profile.

Usage: Following is a listing of the TCP-Options subprofile:

```
admin> list tcp
[in CONNECTION/"":tcp-clear-options (new)]
host = ""
port = 0
host2 = ""
port2 = 0
host3 = ""
port3 = 0
host4 = ""
port4 = 0
detect-end-of-packet = no
end-of-packet-pattern = ""
flush-length = 0
flush-time = 0
```

TCP-Syn-Flood-Protect

Description: Enables/disables a flush of old Transmission Control Protocol (TCP) sockets that are in a Tcps_synrcvd state, when a heavy Tcp-syn flooding occurs.

Usage: Valid values are as follows:

- Yes—Enables a flush of these sockets
- No—Disables any flush of these sockets

Example: set tcp-syn-flood-protect = yes

Location: IP-Global

TCP-Timeout

Description: Specifies the number of seconds for a timeout period for Transmission Control Protocol (TCP) connection attempts that use the DNS-List-Attempt feature.

Usage: Specify an integer indicating the number of seconds allowed for a TCP timeout. Valid values range from 0 to 200 seconds. At the default value of 0 (zero), the system attempts a fixed number of retries at escalating intervals, adding up to about 170 seconds total. (Other limits in the system terminate TCP retries after about 170 seconds, even if this parameter is set to a higher value.) If you set TCP-Timeout to a nonzero value, the value is how many seconds TCP retries persist. After the specified number of seconds, the retries stop, the connection is considered lost, and the Stinger unit attempts to connect to the next address in the list.

Example: set tcp-timeout = 30

Location: IP-Global

TDR-Automatic-Result

Description: Indicates the distance to the first detected fault in a copper loop test (CLT). Reported in hundredths (.01) feet for English units or centimeters for metric units. This value is only generated for time domain reflectometry (TDR) tests in automatic mode.

Usage: The TDR-Automatic-Result value is read only.

Example: `tdr-automatic-result = 0`

Location: CLT-Result

See Also: TDR-Automatic-Result

TDR-Avg

Description: Specifies the number of times the time domain reflectometry (TDR) pulse is sent in a copper loop test (CLT).

Usage: Range is from 1 to 5 pulses. Results are averaged if more than one pulse is used.

Example: `set tdr-avg = 2`

Location: CLT-Command

See Also: TDR-VP

TDR-Distance-Level

Description: Indicates TDR-Sample-Count pairs of time domain reflectometry (TDR) test data. The first number in each pair is the distance in hundredths (.01) feet for English units or in centimeters for metric units. The second number in each pair is the level-axis raw data.

Usage: The TDR-Distance-Level is a read only value.

Example: `tdr-distance-level = [ { 0 0 } { 0 0 } { 0 0 } { 0 0 } { 0 0 } { 0 0 } { 0 0 } +`

Location: CLT-Result

See Also: TDR-VP

TDR-Gauge

Description: Specifies the gauge of the cable in the loop in a copper loop test (CLT).

Usage: Valid values are as follows:

- 22, 24, or 26 AWG if english units are used.
- 4, 5, or 6 tenths of a millimeter if metric units are used.

Example: `set tdr-gauge = 4`

Location: CLT-Command

See Also: TDR-VP

TDR-Get-Type

Description: Specifies the type of time domain reflectometry (TDR) test in a copper loop test (CLT).

Usage: Valid values are as follows:

- `Auto`—First fault is automatically detected.
- `Manual`—User specifies measurement range.

Example: `set tdr-get-type = manual`

Location: CLT-Command

See Also: TDR-VP

TDR-Measurement-Length

Description: Specifies the total length of measurement in manual mode starting from start-distance in a copper loop test (CLT).

Usage: Specify a number according to the units used.

If units used are:	Specify:
English	A number from 100 to 20,000 to designate feet. Start-distance plus measurement length must not exceed 20,000 feet.
Metric	A number from 32 to 6097 to designate meters. Start-distance plus measurement length must not exceed 6097 meters.

Example: `set tdr-measurement-length = 10000`

Location: CLT-Command

See Also: TDR-VP

TDR-Sample-Count

Description: Indicates the number of distance or level data points returned for a time domain reflectometry (TDR) test in a copper loop test (CLT).

Usage: If the TDR test is performed in auto mode and no faults are found, Sample-Count will be set to 0.

Example: `tdr-sample-count = 0`

Location: CLT-Result

See Also: TDR-Automatic-Result

TDR-Start-Distance

Description: Specifies the distance at which to start time domain reflectometry (TDR) measurement in manual mode in a copper loop test (CLT).

Usage: Specify a number according to the units used.

If units used are:	Specify:
english	A number from 15-20,000 to designate feet.
metric	A number from 5-6097 to designate meters.

Example: set tdr-start-distance = 6000

Location: CLT-Command

See Also: TDR-VP

TDR-Unit

Description: Specifies the units of measurement for time domain reflectometry (TDR) testing.

Usage: Valid values are as follows:

- english—English units are used for the measurement.
- metric—Metric units are used for the measurement.

Example: set tdr-unit = metric

Location: CLT-Command

See Also: TDR-Gauge

TDR-VP

Description: Specifies the velocity of propagation for the cable under test in a copper loop test (CLT).

Usage: Valid range is from 40 to 99 percent of the speed of light.

Example: set tdr-vp = 90

Location: CLT-Command

See Also: TDR-Gauge

Telco-Options

Description: A subprofile that enables you to set telephone-company options for a connection.

Usage: With a Connection profile as the working profile, list the Telco-Options subprofile. For example:

```
admin> list telco-options
[in CONNECTION/tim:telco-options]
answer-originate=ans-and-orig
nailed-groups=1
force-56kbps=no
data-service=56k-restricted
call-by-call=0
billing-number=""
transit-number=""
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: Connection *station*

See Also: Answer-Originate, Billing-Number, Call-By-Call, Data-Service, Force-56Kbps, Nailed-Groups, Transit-Number

Telnet

Description: Enables or disables the Telnet command from the terminal-server interface.

Usage: Valid values are as follows:

- Yes—Specifies that operators can invoke Telnet sessions from the terminal-server interface.
- No—Specifies that the use of Telnet from the terminal server is disabled. This is the default.

Example: set telnet = yes

Dependencies: If terminal services are disabled, Telnet does not apply.

Location: Terminal-Server > Terminal-Mode-Configuration > Telnet-Options

See Also: Ping, SLIP, Telnet, Terminal-Mode-Configuration, Traceroute

Telnet-Host-Auth

Description: Specifies whether immediate Telnet sessions require local authentication or authentication by the Telnet host only.

Usage: Valid values are as follows:

*   `Yes`—Specifies that the session requires authentication only by the Telnet host.
*   `No`—Specifies that the session must be locally authenticated before undergoing authentication by the Telnet host. This is the default.

Example: `set telnet-host-auth = yes`

Dependencies: If terminal services are disabled, Telnet-Host-Auth does not apply.

Location: Terminal-Server > Immediate-Mode-Options

See Also: Immediate-Mode-Options, Telnet

Telnet-Mode

Description: Specifies the default Telnet mode.

Usage: Specify one of the following values:

*   ASCII (the default) specifies standard 7-bit mode. In 7-bit mode, bit 8 is set to 0 (zero).
*   Binary specifies that the Stinger unit attempts to negotiate the Telnet 8-bit binary option with the server at the remote end. You can run X -Modem and other 8-bit file transfer protocols in this mode.
*   Transparent specifies that you can send and receive binary files without having to be in Binary mode. You can run the same file transfer protocols that Binary mode makes available.

Example: `set telnet-mode = ascii`

Dependencies: Consider the following:

*   In 8-bit binary mode, the Telnet escape sequence does not operate. The Telnet session can close only if one end of the connection quits the session.
*   A user can override the Binary setting on the Telnet command line.
*   If terminal services are disabled, Telnet-Mode does not apply.
*   Not all devices support the Binary mode option. Some devices partially follow the Telnet RFC, but do not enforce the Telnet restriction of using only 7-bit ASCII. They accept 8-bit data and, after doing the appropriate processing, forward all data received. If you specify Transparent for these devices, you can escape the IAC character and add a null after every CR to cause the devices to work.

Location: Terminal-Server > Terminal-Mode-Configuration > Telnet-Options

See Also: Telnet, Telnet-Options, Terminal-Mode-Configuration

Telnet-Options

Description: A nested subprofile that contains terminal-server configuration options for interactive users.

Usage: With Terminal-Server as the working profile, list the Terminal-Mode-Configuration subprofile's Telnet-Options subprofile. For example:

```
admin> list terminal-server terminal-mode-configuration
telnet-options
[in TERMINAL-SERVER:terminal-mode-configuration:telnot-options]
telnet = no
telnet-mode = ascii
auto-telnet = no
local-echo=no
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: Terminal-Server

See Also: Auto-Telnet, Local-Echo, Telnet, Telnet-Mode

Telnet-Password

Description: Specifies the password users must enter to access the Stinger unit via Telnet. If you specify a password, a user is allowed three tries of 60 seconds each to enter the correct password.

Usage: Specify a password of up to 20 characters. The default is null. If you accept the default, the Stinger unit does not prompt a user for a password.

Example: set telnet-password = mypw

Location: IP-Global

See Also: Auto-Telnet, Telnet, Telnet-Host-Auth

Temporary-Route

Description: Specifies that the Stinger unit adds the route to the routing table only when the link is up. Temporary-Route is especially useful for nailed-up IP-routing connections.

Usage: Valid values are as follows:

- Yes—Specifies that a route from the routing table is excluded when its connection is down.

- No—Specifies that a route from the routing table is included even if its connection is down. This is the default.

Example: set temporary-route = no

Location: Connection *station* > IP-Options

See Also: IP-Options, IP-Routing-Enabled, Private-Route, RIP

Terminal-Mode-Configuration

Description: A subprofile containing terminal-server configuration options for interactive users.

Usage: With Terminal-Server as the working profile, list the Terminal-Mode-Configuration subprofile. For example:

```
admin> list terminal-mode-configuration
[in TERMINAL-SERVER:terminal-mode-configuration]
silent-mode=no
clear-screen=yes
system-password=""
banner="** Lucent Terminal Server **"
login-prompt="Login: "
password-prompt="Password: "
third-login-prompt=""
third-prompt-sequence=last
prompt="admin% "
terminal-type=vt100
clear-call=no
buffer-chars=yes
ping=no
traceroute=no
tcp=no
telnet-options={ no ascii no no }
ip-add-msg="IP address is "
prompt-format=no
login-timeout=300
rlogin-options={ no 1023 128 }
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: Terminal-Server

See Also: Banner, Buffer-Chars, Clear-Call, Clear-Screen, Login-Prompt, Password-Prompt, Ping, Prompt, Prompt-Format, Rlogin-Options, Silent-Mode, System-Password, TCP, Telnet-Options, Terminal-Type, Third-Login-Prompt, Traceroute

Terminal-Server (profile)

Description: A profile that enables you to configure terminal-server features.

Usage: Use the Read and List commands to make Terminal-Server the working profile and list its contents. For example:

```
admin> read terminal-server
TERMINAL-SERVER read

admin> list
[in TERMINAL-SERVER]
enabled=no
security-mode=none
terminal-mode-configuration={ no yes "" +
immediate-mode-options={ none no "" 0 }
menu-mode-options={ no no no "" 0.0.0.0 "" 0.0.0.0 "" 0.0.0.0 +
slip-mode-configuration={ no no }
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
TERMINAL-SERVER written
```

See Also: Enable, Immediate-Mode-Options, Menu-Mode-Options, Security-Mode, SLIP-Mode-Configuration, Terminal-Mode-Configuration

Terminal-Type

Description: Specifies the default terminal type for Telnet and Rlogin sessions.

Usage: Specify a terminal type. You can enter up to 15 characters. The default is vt100.

Example: set terminal-type = vt100

Dependencies: If terminal services are disabled, Terminal-Type does not apply.

Location: Terminal-Server > Terminal-Mode-Configuration

See Also: Terminal-Mode-Configuration

Term-Rate

Description: Specifies the bit rate of a Stinger unit serial port. When you modify the bit rate of a serial port, you might also need to change the data-rate setting of the terminal accessing that port.

Usage: Specify one of the following values:

    57600
    38400
    19200
    9600 (the default)
    4800
    2400

Example: set term-rate = 19200

Location: Serial {shelf-*N* slot-*N N*}

See Also: Auto-Logout, Flow-Control, Physical-Address, User-Profile

Test-Operation

Description: Specifies the type of copper loop test (CLT).

Usage: Select one of the following values.

Value	Specifies
`line-dmm-test`	Digital multimeter tests.
`line-inls-test`	Insertion loss test.
`line-bgns-test`	Background noise test.
`line-signs-test`	Signal to noise test.
`line-lpres-test`	Loop resistance test.
`line-cldet-test`	Load coil detection test.
`line-impstart-test`	Start impulse noise test.
`line-impread-test`	Read current result of impulse noise test.
`line-impstop-test`	Stop impulse noise test.
`line-calib-test`	Calibrate internal test head.
`line-tonesnd-test`	Send tone down loop.
`line-tonercv-test`	Measure amplitude and frequency of tone.
`line-tdrset-test`	Set TDR parameters.
`line-tdr-test`	Execute TDR test.
`line-reset-test`	Reset test head electronics.
`line-vers-test`	Report version numbers of hardware and software

Example: `set test-operation = line-bgns-test`

Location: CLT-Command

See Also: Test-Result-Status

Test-Result-Status

Description: Indicates the status of the copper loop test.

Usage: Valid values are

- `not-valid`—Test has not been performed or is in progress.
- `valid` —Test is complete and the results are viable in the profile.
- `out-of-range`—Test failed due to measurements or parameters that were out of range.

Example: `test-result-status = valid`

Location: CLT-Result

See Also: Dmm-Result

Text-*N* (*N*=1–4)

Description: Specifies text that the Stinger unit displays in the terminal-server menu for the Telnet host specified by Host-*N*.

Usage: Specify a text string describing the corresponding Telnet host. The default is null.

Example: `set text-1 = database-server`

Dependencies: When terminal services are disabled, Text-*N* does not apply. In addition, Text-*N* is ignored if Remote-Configuration is set to Yes.

Location: Terminal-Server > Menu-Mode-Options

See Also: Menu-Mode-Options, Remote-Configuration

Third-Login-Prompt

Description: Specifies an optional third prompt for a terminal-server login. When a user logs into the terminal server, he or she supplies a username and password. The Third-Login-Prompt setting enables the Stinger unit to get additional information from the user. The unit does not use the information, but passes it to the RADIUS server. The user can enter up to 80 characters.

Usage: Specify up to 20 characters. The default is null, which specifies that no third prompt appears.

Example: `set third-login-prompt = ID Number>>`

If Third-Prompt-Sequence=First, the terminal server displays the third prompt before the login and password prompts:

```
ID Number>>
Login:
Password:
```

If Third-Prompt-Sequence=Last, the terminal server displays the third prompt after the login and password prompts:

```
Login:
Password:
ID Number>>
```

Dependencies: Consider the following:

- If authentication does not occur through the RADIUS server, the terminal server does not display the Third-Login-Prompt.

- If terminal services are disabled, or if Auth-Type is set to a value other than RADIUS, Third-Login-Prompt does not apply.

Location: Terminal-Server > Terminal-Mode-Configuration

See Also: Auth-Type, Login-Prompt, Password-Prompt, Prompt, Prompt-Format, Terminal-Mode-Configuration,Third-Prompt-Sequence

Third-Prompt-Sequence

Description: Specifies whether the Third-Login-Prompt should appear before or after the Login-Prompt and Password-Prompt in the login sequence.

Usage: Specify First or Last. The default is Last.

Example: set third-prompt-sequence = last

Location: Terminal-Server > Terminal-Mode-Configuration

See Also: Auth-Type, Login-Prompt, Password-Prompt, Prompt, Prompt-Format, Terminal-Mode-Configuration

Thresh-Profile

Description: Specifies the name of a DSL-threshold profile.

Usage: Specify a name of up to 22 characters. A DSL-Threshold profile is not tied to a particular line, but is linked instead by the `thresh-profile` parameter of an AL-DMT profile for that line. During startup, the system creates a default DSL-Threshold profile named default and also sets the `thresh-profile` parameter in each AL-DMT profile to `default`, creating the link between the two profiles.

Example: set thresh-profile = dsl-thrprof1

Location: AL-DMT

See Also: DSL-Threshold (profile)

Tidle-Ms

Description: Specifies the interval (in milliseconds) during which the Q.SAAL layer is idle, for UNI 3.1 only.

Usage: Valid values are from 1000 to 20000. The default value is 15000.

Example: `tidle-ms = 15000`

Location: ATM-If-Sig-Params *N* > Qsaal-Options

See Also: Tcc-Ms

Time

Description: A subprofile that specifies the current hour, minute, and second.

Usage: With Timedate as the working profile, list the Time subprofile. For example:

```
admin> list time
[in TIMEOUT/time]
hour=12
minute=37
second=33
```

You can then use the Set command to modify the settings in the subprofile.

```
admin> set hour=16
```

As an alternative, you can simply use the Set command:

```
admin> set time hour=16
```

Dependencies: You can also use the Date command to set the current hour, minute, and second.

Location: Timedate

See Also: Date

Timedate (profile)

Description: A profile that shows the current system time and date.

Usage: Use the Read and List commands to make Timedate the working profile and list its contents. For example:

```
admin> read timedate
TIMEDATE read
```
```
admin> list
[in TIMEDATE]
time={ 12 37 33 }
date={ Friday October 18 1996 }
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
TIMEDATE written
```

See Also: Date, Time

Time-Stamp

Description: Indicates the Time at which the local node recognized connectivity from the advertising node to the reachable address prefix.

Usage: The Time-Stamp setting is read only.

Example: time-stamp = 0

Location: PNNI-Route-Addr

See Also: Addr-Index, Adv-Node-Id, Adv-Port-Id, Type

Tkeepalive-Ms

Description: Pertains to the signaling ATM adaptation layer (SAAL) of Asynchronous Transfer Mode (ATM). Specifies the poll interval (in milliseconds) when the Q.SAAL layer is active in a transient state.

Usage: When the Tkeepalive-Ms parameter is set to 0 (the default), a default value based on an ATM signaling protocol is used. Valid values are from 0 to 3000.

Example: `tkeepalive-ms = 0`

Location: ATM-If-Sig-Params *N* > Qsaal-Options

See Also: Tpoll-Ms

Tnoresponse-Ms

Description: Specifies the maximum interval (in milliseconds) between receipt of STAT protocol data units (PDUs).

Usage: When the Tnoresponse-Ms parameter is set to 0 (the default), a default value based an Asynchronous Transfer Mode (ATM) signaling protocol is used. Valid values are from 0 to 20000.

Example: `tnoresponse-ms = 0`

Location: ATM-If-Sig-Params *N* > Qsaal-Options

See Also: Tpoll-Ms

Tns-Advertised-Port-Id

Description: Specifies the port ID on the advertising node of the interface used to reach the transit network.

Usage: Specify a number to assign to the transit network selection (TNS) port ID.

Example: `tns-advertised-port-id = 0`

Location: PNNI-Route-Tns { *N* other other *NN:NN:NN:NN N* }

See Also: Tns-Index, Tns-If-Index, Tns-Metrics-Tag, Tns-Originate-Advertisement, Tns-PNNI-Scope, Tns-Route-Type, Tns-Vp-Capability

Tns-Advertising-Node-Id

Description: Specifies the Private Network-to-Network Interface (PNNI) node ID of a node that advertises this route.

Usage: You can enter the full 22-byte ID or an alias, as described in the *Stinger ATM Configuration Guide*.

Example: `tns-advertising-node-id =`
`00:00:00:00:00:00:00:00:00:00:00:00:00:00:0+`

Location: PNNI-Route-Tns { *N* other other *NN:NN:NN:NN N* }

See Also: Tns-Index, Tns-If-Index, Tns-Metrics-Tag, Tns-Originate-Advertisement, Tns-PNNI-Scope, Tns-Route-Type, Tns-Vp-Capability

Tns-If-Index

Description: Specifies the local interface over which the transit network can be reached.

Usage: Specify a number to assign to the index. The zero value specifies an unknown interface or reachability through a remote node.

Example: `tns-if-index = 0`

Dependencies: A nonzero value is allowed only if the value of the Tns-Proto parameter is not PNNI, and the node identified by Tns-Advertising-Node-Id is instantiated within this non-PNNI switching system

Location: PNNI-Route-Tns { *N* other other *NN:NN:NN:NN N* }

See Also: Tns-Index, Tns-Metrics-Tag, Tns-Originate-Advertisement, Tns-PNNI-Scope, Tns-Route-Type, Tns-Vp-Capability

Tns-Index

Description: A subprofile specifying a complex index value identifying the transit network selection (TNS). The index elements are defined in the subprofile.

Usage: Use the Dir and Read and List commands to make PNNI-Route-Tns the current profile, and then list Tns-Index.

Example: `[in PNNI-ROUTE-TNS/{ 0 other other "" 0 }:tns-index ]`
```
node-index = 0
route-tns-type = other
route-tns-plan = other
route-tns-id = ""
route-tns-index = 0
```

See Also: Node-Index, Tns-If-Index, Tns-Metrics-Tag, Tns-Originate-Advertisement, Tns-PNNI-Scope, Tns-Route-Type, Tns-Vp-Capability

Tns-Metrics-Tag

Description: Specifies a tag representing a group of metric settings that apply to the connectivity from the advertising node to the reachable transit network.

Usage: The tag must be defined in one or more PNNI-Metrics profiles. If no traffic parameters apply, the zero value is used. For details of defining a tag, see the *Stinger Private Network-to-Network Interface (PNNI) Supplement*.

Example: `tns-metrics-tag = 0`

Location: PNNI-Route-Tns { *N* other other *NN:NN:NN:NN N* }

See Also: Tns-Index, Tns-If-Index, Tns-Originate-Advertisement, Tns-PNNI-Scope, Tns-Route-Type, Tns-Vp-Capability

Tns-Originate-Advertisement

Description: Specifies whether or not the transit network should be advertised by the local node into its Private Network-to-Network Interface (PNNI) routing domain.

Usage: With the default `yes` setting, the local node advertises reachability of the address.

Example: `tns-originate-advertisement = yes`

Location: PNNI-Route-Tns { *N* other other *NN:NN:NN:NN N* }

See Also: Tns-Index, Tns-If-Index, Tns-Metrics-Tag, Tns-PNNI-Scope, Tns-Route-Type, Tns-Vp-Capability

Tns-PNNI-Scope

Description: Specifies the extent of the advertisement of reachability from the advertising node to the transit network. By scope is meant the routing range of a connection.

Usage: The default value is 0.

Example: `tns-pnni-scope = 0`

Location: PNNI-Route-Tns { *N* other other *NN:NN:NN:NN N* }

See Also: Tns-Index, Tns-If-Index, Tns-Metrics-Tag, Tns-Originate-Advertisement, Tns-Route-Type, Tns-Vp-Capability

Tns-Proto

Description: Specifies the mechanism by which the advertising node learned of reachability to the transit network.

Usage: Valid values are as follows:

- `other`— Unspecified
- `local`—A local routing protocol such as interim link management interface (ILMI)
- `mgmt`—A management protocol such as Simple Network Management Protocol (SNMP)
- `pnni`—ATM Forum Private Network-to-Network Interface (PNNI) dynamic routing protocol

Example: set tns-proto = other

Location: PNNI-Route-Tns { *N* other other *NN:NN:NN:NN N* }

See Also: Tns-Index, Tns-If-Index, Tns-Metrics-Tag, Tns-Originate-Advertisement, Tns-PNNI-Scope, Tns-Route-Type, Tns-Vp-Capability

Tns-Route-Type

Description: Specifies the type of connectivity from the advertising node to the transit network.

Usage: Valid values are as follows:

- `other` —Unspecified
- `reject`— A route that discards traffic
- `internal`— Directly attached to the logical node advertising the address
- `exterior`—Reachable through the PNNI routing domain, but which is not located in the PNNI routing domain). This is the default.

Example: set tns-route-type = internal

Location: PNNI-Route-Tns { *N* other other *NN:NN:NN:NN N* }

See Also: Tns-Index, Tns-If-Index, Tns-Metrics-Tag, Tns-Originate-Advertisement, Tns-PNNI-Scope, Tns-Vp-Capability

Tns-Vp-Capability

Description: Indicates whether virtual path connections (VPCs) can be established from the advertising node to the reachable transit network. Pertains to Private Network-to-Network Interface (PNNI).

Usage: The default No indicates that VPCs cannot be established.

Example: tns-vp-capability = no

Location: PNNI-Route-Tns { *N* other other *NN:NN:NN:NN N* }

See Also: Tns-Index, Tns-If-Index, Tns-Metrics-Tag, Tns-Originate-Advertisement, Tns-PNNI-Scope, Tns-Route-Type

Toggle-Screen

Description: Specifies whether an interactive user can switch between terminal-server menu mode and command mode.

Usage: Valid values are as follows:

- `Yes`—Specifies that terminal-server users can switch between command mode and menu mode. This is the default.
- `No`—Specifies that users have access only to the screen that you configure to be displayed when a user logs in.

Example: set toggle-screen = no

Dependencies: If terminal services are disabled, Toggle-Screen does not apply.

Location: Terminal-Server > Menu-Mode-Options

See Also: Menu-Mode-Options, Start-With-Menus

Tone-Send-Frequency

Description: Specifies the frequency of sent tone in a copper loop test.

Usage: Valid range is from 10 kHz to 1600 kHz.

Example: `set tone-send-freq = 20`

Location: CLT-Command

See Also: Tone-Send-Level

Tone-Send-Level

Description: Specifies the amplitude of a sent tone in a copper loop test.

Usage: Valid range is from -10 dBm to 10dBm.

Example: `Set tone-send-level = 1`

Location: CLT-Command

See Also: Tone-Send-Level

Top-Status

Description: Specifies the default content of the upper-right portion of the status window.

Usage: Valid values are as follows:

- `general-info` —Specifies that the Stinger unit displays general information and statistics for the system. This is the default.
- `log-window`—Specifies that the Stinger unit displays saved system-event log entries.
- `line-status`—Specifies that the Stinger unit displays the status of system telephony interfaces.

Example: `top-status = general-info`

Location: User *name*

See Also: User (profile)

TOS-Options

Description: A subprofile for configuring Type-of-Service (TOS) settings.

Usage: With a Connection profile as the working profile, list the TOS-Options subprofile. For example:

```
admin> list ip-options tos-options
[in CONNECTION/"":ip-options:tos-options]
active=no
precedence=000
type-of-service=normal
apply-to=input
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: Connection *station* > IP-Options

See Also: Apply-To, Precedence, Type-of-Service

Total-Count

Description: Indicates the total number of a particular class of devices present in the system.

Usage: The Total-Count setting is read only.

Example: `total-count = 10`

Location: Device-Summary

See Also: Device-Address, Disabled-Count, Operational-Count

Tpoll-Ms

Description: Specifies the poll interval (in milliseconds) when the Q.SAAL layer is active.

Usage: When the tpoll parameter is set to 0 (the default), a default value based on an Asynchronous Transfer Mode (ATM) signaling protocol is used. Valid values are from 0 to 3000.

Example: `tpoll-ms = 0`

Location: ATM-If-Sig-Params *N* > Qsaal-Options

See Also: Tkeepalive-Ms, Tnoresponse-Ms

TPP-State

Description: Enables or disables the test pattern procedure.

Usage: Valid values are as follows:
`disabled`— Test pattern procedure is currently disabled on this link
`operating`— Test pattern procedure is currently operating on this link

Example: `set tpp-state = disabled`

Location: IMAgroup *name*

See Also: TPP-Test-Link, TPP-Test-Pattern

TPP-Test-Link

Description: Specifies a Simple Network Management Protocol (SNMP) interface as the test link for use in the test pattern procedure.

Usage: Valid range is from -1 to 24

Example: `set tpp-test-link = -1`

Location: IMAGROUP *name* > Ima-Rt

See Also: TPP-State, TPP-Test-Pattern

TPP-Test-Pattern

Description: Indicates a number that specifies the test pattern transmitted in the IMA control protocol (ICP) cell (octet 17) on the link during the inverse multiplexing ATM (IMA) test pattern procedure.

Usage: Valid range is from -1 to 255

Example: `set tpp-test-pattern = -1`

Location: IMAGROUP *name* > Ima-Rt

See Also: TPP-State, TPP-Test-Link

TPP-Test-Status

Description: Indicates the current state of the test pattern procedure.

Usage: Valid values are as follows:
`Disabled`—Test pattern procedure is currently disabled on this link
`Operating`—Test pattern procedure is currently operating on this link
`Link-fail`—Test pattern procedure has failed on this link

Example: `tpp-test-status = disabled`

Location: IMA-Group-Stat *name*

See Also: TPP-State, TPP-Test-Link

Traceroute

Description: Enables or disables the use of the Traceroute command in the terminal-server interface.

Usage: Valid values are as follows:

- `Yes`—Specifies that terminal-server users can use the Traceroute command.

- `No`—Specifies the Traceroute command is disabled. This is the default.

Example: `set traceroute = yes`

Dependencies: If terminal services are disabled, Traceroute does not apply.

Location: Terminal-Server > Terminal-Mode-Configuration

See Also: Ping, SLIP, TCP, Telnet,Telnet-Options, Terminal-Mode-Configuration

Traffic-Descr-Index

Description: *Not currently used.* Specifies an index to the atmTrafficDescrParamTable defined in RFC 1695. This traffic descriptor is used when establishing switched virtual channels for use as SVCC-based RCCs to or from PNNI logical group nodes.

Location: ATM-QoS

Traffic-Descriptor-Type

Description: *Not currently used.* Specifies the ATM traffic descriptor type, as defined in RFC 2514, Definitions of Textual Conventions and OBJECT-IDENTITIES for ATM Management.

Location: ATM-QoS

Transit-Number

Description: Specifies an Interexchange Carrier (IEC) for long-distance PRI calls.

Usage: Specify one of the following dialing prefixes:
   288 (AT&T)
   222 (MCI)
   333 (Sprint)

The default is null. If you accept the default, the Stinger unit uses any available IEC for long-distance calls.

Example: set transit-number = 222

Dependencies: *This parameter is not currently used in the Frame-Relay profile.* If a nailed-up Frame-Relay datalink connection is in use, Transit-Number does not apply

Location: Connection *station* > Telco-Options, Frame-Relay *fr-name*

See Also: Telco-Options

Transmit-Power

Description: Indicates the current transmission power the transceiver is using, reported in decibels under one milliwat (dBm).

Usage: The transmit power value is read only.

Example: transmit-power = 10

Location: HDSL2-Stat { shelf-N slot-N N } > Physical-Statistic

Transmitted-Rs-Blocks

Description: Indicates the number of transmitted Reed-Solomon blocks. Enabled on 24-port and 48-port LIMs only.

Usage: The Transmitted-rs-Blocks value is read only.

Example: transmitted-rs-blocks = 416772

Location: AL-DMT-Stat { shelf-*N* slot-*N N* } > Physical-Statistic

See Also: Received-Rs-Blocks, Incoming-Cells

Trap (profile)

Description: A profile containing settings that determine how the Stinger unit traps events. A trap is a mechanism in SNMP for reporting system change in real time. To report system change, the Stinger unit sends a traps-PDU (Protocol Data Unit) to the SNMP manager. (For the most up-to-date information about events, see the Ascend Enterprise MIB.)

Usage: Use the Read (or New) and List commands to make Trap the working profile and list its contents. For example:

```
admin> new trap
TRAP/""
admin> list
[in TRAP/"" (new)]
host-name* = ""
active-enabled = yes
community-name = ""
host-address = 0.0.0.0
host-port = 162
inform-time-out = 1500
inform-retry-count = 4
notify-tag-list = default
target-params-name = default
alarm-enabled = yes
security-enabled = no
port-enabled = no
slot-enabled = no
coldstart-enabled = yes
warmstart-enabled = yes
linkdown-enabled = yes
linkup-enabled = yes
ascend-enabled = yes
console-enabled = yes
use-exceeded-enabled = yes
password-enabled = yes
fr-linkup-enabled = yes
fr-linkdown-enabled = yes
event-overwrite-enabled = yes
radius-change-enabled = yes
lan-modem-enabled = yes
slot-profile-change-enabled = yes
power-supply-enabled = yes
authentication-enabled = yes
config-change-enabled = yes
sys-clock-drift-enabled = yes
suspect-access-resource-enabled = yes
watchdog-warning-enabled = yes
```

```
controller-switchover-enabled = no
call-log-serv-change-enabled = yes
wan-line-state-change-enabled = yes
call-log-dropped-pkt-enabled = yes
lim-sparing-enabled = no
interface-sparing-enabled = no
secondary-controller-state-change-enabled = no
pctfi-trunk-status-change-enabled = yes
no-resource-available-enabled = yes
dsl-thresh-trap-enabled = no
atm-pvc-failure-trap-enabled = no


admin>
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes, enter the Write command. For example::

```
admin> write
TRAP/host-231 written
```

Trellis-Encoding

Description: Enables/disables trellis encoding, which is a method of forward error correction.

Usage: The use of trellis encoding is specified in the DMT standard. Disabling it can increase performance, at the cost of becoming noncompliant with the standard.

Example: Valid values are as follows:

- Yes—Enables trellis encoding. This is the default for all except the 48-port LIM.
- No—Disables trellis encoding. Because trellis encoding is not available for the 48-port LIM, no is the default for the 48-port LIM.

Example: trellis-encoding = yes

Location: AL-DMT { shelf-*N* slot-*N* } > Line-Config

See Also: Far-End-FEC, Far-End-HEC

Trunk-CAC-Config *N*

Description: A subprofile of the ATM-Config profile. The system creates such a subprofile for each trunk port.

Usage: Following is an example of a Trunk-CAC subprofile:

Example:

```
admin> list trunk-cac-config
[in ATM-CONFIG:trunk-cac-config]
trunk-cac-config[1] = { yes 1:17:1 155520 50 }
trunk-cac-config[2] = { no 1:17:2 155520 10 }
trunk-cac-config[3] = { yes 1:18:1 45000 10 }
trunk-cac-config[4] = { yes 1:18:2 45000 10 }
```

```
admin> list 1
[in ATM-CONFIG:trunk-cac-config[1]]
enable = yes
port-num = 1:17:1
line-rate = 45000
over-subscription = 10
```

Trunk-Daughter-Dev (profile)

Description: A profile for configuring a trunk daughter device.

Usage: Use the Dir and Read commands to make this the current profile, and then the List command, as in this example:

Example:

```
admin> dir trunk-daught
0  11/21/2000 10:40:59  { shelf-1 trunk-module-1 1 }
0  11/21/2000 10:40:59  { shelf-1 trunk-module-2 1 }
admin> read trunk-d  { shelf-1 trunk-module-2 1 }
TRUNK-DAUGHTER-DEV/{ shelf-1 trunk-module-2 1 } read
admin> list
[in TRUNK-DAUGHTER-DEV/{ shelf-1 trunk-module-2 1 }]
device-address* = { shelf-1 trunk-module-2 1 }
device-state = trunk-daughter-oper-state-up
trunk-daughter-type = trunk-daughter-oc3-quad
previous-trunk-daughter-type = trunk-daughter-none
```

See Also: Device-State,

Trunk-Daughter-Type

Description: Specifies the type of trunk daughter module present in a device.

Usage: Valid values are as follows:

- trunk-daughter-none
- trunk-daughter-oc3-quad
- trunk-daughter-ds3
- trunk-daughter-oc3-ds3-combo
- trunk-daughter-oc3-single
- trunk-daughter-ds3-single
- trunk-daughter-e3
- trunk-daughter-e3-single

Example: set trunk-daughter-type = trunk-daughter-ds3

Location: Trunk-Daughter-Dev {Shelf *N* Slot *N N*}

See Also: Device-State, Previous-Trunk-Daughter-Type

Trunk-Group

Description: *Not currently used.* Specifies a trunk-group number.

- In a T1, E1, or SWAN profile, Trunk-Group assigns a channel to a trunk group.
- In a Call-Route profile, Trunk-Group specifies that calls received on this trunk group of channels are routed to the address in the index field.

Usage: Specify a trunk-group number from 2 to 9. In a T1 or E1 profile, the default is 9. In a Call-Route profile, the default is 0 (zero), which matches any trunk-group number.

Example: set trunk-group = 4

Dependencies: Use-Trunk-Groups must be set to Yes for Trunk-Group to have an effect.

Location: Call-Route {{{shelf-*N* slot-*N N*} *N*} *N*},
E1 {shelf-*N* slot-*N N*} > Line-Interface > Channel-Config *N*,
SWAN {shelf-*N* slot-*N N*} > Line-Config,
T1 {shelf-*N* slot-*N N*} > Line-Interface > Channel-Config *N*

See Also: Call-Route (profile), Channel-Config N, Line-Config, Use-Trunk-Groups

TS-Idle-Mode

Description: Specifies when the Stinger unit is to reset the terminal-server idle-session timer.

Usage: Valid values are as follows:

- `no-idle`—disables the idle timer. This is the default.
- `input-only-idle`—Specifies that the Stinger unit resets the timer when an input character is received.
- `input-output-idle`—Specifies that the Stinger unit resets the timer when either input or output characters are processed.

Example: set ts-idle-mode = input-only-idle

Location: Answer-Defaults > Session-Info, Connection *station* > Session-Options

See Also: Session-Options, TS-Idle-Timer

TS-Idle-Timer

Description: Specifies the number of seconds a terminal-server session can remain idle before being terminated.

Usage: Specify a number from 0 to 65535. The default is 120.

Example: set ts-idle-timer = 360

Dependencies: The TS-Idle-Timer setting has no effect if TS-Idle-Mode=No-Idle.

Location: Answer-Defaults > Session-Info, Connection *station* > Session-Options

See Also: Session-Options, TS-Idle-Mode

Tx-Avail-Cellrate

Description: Indicates the current cell rate (truncated value in cells per second) provided by this inverse multiplexing ATM (IMA) group in the transmit direction, considering all the transmit links in the active state.

Usage: Valid range for this read-only value is from zero to 2147483647.

Example: `rx-avail-cellrate = 7188`

Location: IMA-Group-Stat *name*

See Also: Far-End-IMA-Group-State,Far-End-Txclock-Mode, Near-End-IMA-Group-State, Running-Secs, Rx-Avail-Cellrate, Rx-Frame-Length, Rx-IMA-Id, Tx-Num-Config-Links, Tx-OAM-Label-Value

Tx-Cell-Payload-Scramble-Disabled

Description: In transmitted cells enables/disables scrambling of the 48-byte Asynchronous Transfer Mode (ATM) payload.

Usage: Valid values are as follows:

- `Yes`—Disables scrambling of the 48-byte ATM payload in transmitted cells.
- `No`—Enables scrambling of the 48-byte ATM payload in transmitted cells. This is the default.

Example: `set tx-cell-payload-scramble-disabled = yes`

Dependencies: Do not set TX-Cell-Payload-Scramble-Disabled to Yes unless the receiving switch has disabled the corresponding descramble function.

Location: OC3-ATM {shelf-*N* trunk-module-*N N*} > Line-Config

See Also: Rx-Cell-Payload-Descramble-Disabled, Tx-Scramble-Disabled

Tx-Data-Rate-Limit

Description: Specifies the maximum data rate (in kilobits per second) to be transmitted across the connection. You can use this setting to limit bandwidth for a connection according to the rate charged for the account.

Usage: Specify a number from 0 to 64000. The default is 0 (zero), which disables the data-rate limit feature. If the value you specify is larger than the actual bandwidth provided by the line, the connection behaves as though the data rate limit were disabled, except that additional computations are performed unnecessarily.

Example: `set tx-data-rate-limit = 32000`

Dependencies: The system activates configurable transmit data-rate limits only for connections that use SDSL 48-Port Line Interface module (LIM). If you specify a value for a connection that does not use these modules, the system ignores the settings.

Location: Connection > Session-Options

See Also: Rx-Data-Rate-Limit

Tx-Lid

Description: Specifies a number that identifies the transmit link.

See Also: Valid range for this read-only value is from zero to 31]

Example: `tx-lid = 0`

Location: DS1-ATM-Stat { shelf-*N* slot-*N N*} > Ima-Link-Status

See Also: Near-End-Tx-Link-State, Rx-Lid, Valid-Intervals

Txlink-Config

Description: A subprofile for configurating the transmitting link in an inverse multiplexing ATM (IMA) connection.

Usage: Use the Dir, Read and List commands to make DS1-ATM the current profile. Then list the Line-Config, Ima-Option-Config, and Txlink-Config subprofiles in succession.

Example:

```
admin> list txlink-c
[in DS1-ATM/{ any-shelf any-slot 0
}:line-config:ima-option-config:txlink-confi+
ne-tx-lid = 0
add-link-cond-time = 3
link-recovery-type = fast
fault-clearing-type = auto
fault-clearing-time = 10
priority = 0
```

See Also: Add-Link-Cond-Time, Fault-Clearing-Time,Fault-Clearing-Type, Link-Recovery-Type

Tx-Min-Num-Links

Description: Specifies the minimum number of active transmission (Tx) links required for an inverse multiplexing ATM (IMA) group to remain in operational state.

Usage: Specify a number from 1 to 8.

Example: set tx-min-num-links = 1

Location: IMAgroup *name*

See Also: Expected-Far-End-IMA-Id, Group-Symmetry-Mode, Rx-Min-Num-Links

Tx-Num-Active-Links

Description: Indicates the number of links which are configured to transmit and are currently active in this inverse multiplexing ATM (IMA) group.

Usage: Valid range for this read only value is from zero (0) to 24.

Example: `tx-num-active-links = 2`

Location: IMA-Group-Stat *name*

See Also: Rx-Num-Config-Links, Rx-Num-Active-Links, Rx-Timing-Ref-Link, Tx-Avail-Cellrate, Tx-Timing-Ref-Link, Tx-Num-Config-Links, Tx-OAM-Label-Value

Tx-Num-Config-Links

Description: Indicates the number of links that are configured to transmit in this inverse multiplexing ATM (IMA) group. This parameter overwrites the value of the imaGroupNumRxActLinks attribute when the IMA group is configured in the Symmetrical Configuration group symmetry mode.

Usage: Valid range is from zero (0) to 24.

Example: `tx-num-config-links = 2`

Location: IMA-Group-Stat *name*

See Also: Rx-Num-Config-Links, Rx-Num-Active-Links, Rx-Timing-Ref-Link, Tx-Avail-Cellrate, Tx-Timing-Ref-Link, Tx-OAM-Label-Value

Tx-OAM-Label-Value

Description: Indicates the IMA operations and maintenance (OAM) label value transmitted by the near end (NE) inverse multiplexing ATM (IMA) unit.

Usage: Valid values for this read-only paramater are from one (1) to 255.

Example: `tx-oam-label-value = ` **3**

Location: IMA-Group-Stat *name*

See Also: Rx-Num-Config-Links, Rx-Num-Active-Links, Rx-Timing-Ref-Link, Tx-Avail-Cellrate, Tx-Timing-Ref-Link, Tx-Num-Config-Links

Tx-Scramble-Disabled

Description: Enables or disables scrambling of the entire Asynchronous Transfer Mode (ATM) transmit stream.

Usage: Valid values are as follows:
- `Yes`—Specifies that scrambling of the entire ATM transmit stream is disabled.
- `No`—Specifies that scrambling of the entire ATM transmit stream is enabled. This is the default.

Example: `set tx-scramble-disabled = yes`

Dependencies: Set TX-Scramble-Disabled to Yes only if the receiving switch has disabled the corresponding descramble function.

Location: OC3-ATM {shelf-*N* trunk-module-*N N*} > Line-Config

See Also: Rx-Descramble-Disabled, Tx-Cell-Payload-Scramble-Disabled

Tx-Stuffs-Counter

Description: Indicates the count of stuff events inserted in the transmit direction.

Usage: Valid range for this read-only parameter is from zero to 2147483647

Example: `tx-stuffs-counter = 0`

Location: DS1-ATM-Stat { shelf-*N* slot-*N N*} > Ima-Link-Statistic

See Also: Far-End-Rx-Num-Failures-Counter, Far-End-Sev-Errored-Secs-Counter, Far-End-Unavail-Secs-Counter, OIF-Anomalies-Counter

Tx-Timing-Ref-Link

Description: Indicates the index of the transmit timing reference link to be used by the near-end for inverse multiplexing ATM (IMA) data cell clock recovery from the Asynchronous Transfer Mode (ATM) layer.

Usage: Valid values for this read-only parameter are from zero to 24. The distinguished value of zero is used if no link has been configured in the IMA group, or if the transmit timing reference link has not yet been selected.

Example: `tx-timing-ref-link = 1`

Location: IMA-Group-Stat *name*

See Also: Rx-Num-Config-Links, Rx-Num-Active-Links, Tx-Avail-Cellrate, Tx-Timing-Ref-Link, Tx-Num-Config-Links

Type

Description: Pertains to Private Network-to-Network Interface (PNNI). Specifies the type of connectivity from the advertising node to the address prefix in the PNNI-route-addr profile.

Usage: Valid values are as follows:

- `other`
- `internal`—Directly attached to the logical node advertising the address.
- `exterior`—Reachable through the PNNI routing domain, but not located in the PNNI routing domain. This is the default.
- `reject`—Indicates an address prefix which, if matched, means that the message should be discarded as unreachable. This is used by some protocols to aggregate routes.

Example: **set type = exterior**

Location: PNNI-Route-Addr, PNNI-Summary-Addr *name* > Addr-Index

See Also: Adv-Node-Id, Adv-Port-Id, If-Indexg, Originate-Advert, Pnni-Scope, PTSE-Id-PTSE-Id

Type-of-Service

Description: Specifies the type of service for the data streaming Asynchronous Transfer Mode (ATM).

Usage: The three most significant bits of the Type-of-Service (TOS) byte are priority bits used to set precedence for priority queuing. The next four bits of the TOS byte are used to choose a link according to the type of service. When TOS is enabled, you can set one of the following values in the packet:

- `normal`—Specifies normal service. This is the default. .
- `cost`—Minimizes monetary cost.
- `reliability`—Maximizes reliability.
- `throughput`—Maximizes throughput.
- `latency`—Minimizes delay.

Example: `set type-of-service = cost`

Dependencies: For the Type-of-Service setting to apply, you must set Active to Yes in the TOS-Options subprofile.

Location: Connection *station* > IP-Options > TOS-Options

See Also: Apply-To, Precedence

U

UBR

Description: Enables/disables unspecified bit rate (UBR) traffic in this queue.

Usage: Valid values are as follows:

- Yes—Specifies that the queue supports ATM unspecified-bit-rate (UBR) traffic.
- No—Specifies that the queue does not support UBR traffic. This is the default.

For each queue, one or more ATM services categories can be set to Yes. The ubr parameter must be set to Yes for at least one and no more than two of the active queues assigned to a LIM, control module, or trunk.

Example: set ubr = yes

Location: Controller-Static-Config > Atm-Parameters > Outgoing-Queue

See Also: CBR, Real-Time-VBR

UDP-Cksum

Description: Enables or disables the use of User Datagram Protocol (UDP) checksums on the interface. If you enable UDP checksums, the Stinger unit generates a checksum whenever it sends out a UDP packet. It sends out UDP packets for queries and responses related to the following protocols and facilities:

> DNS
> ECHOSERV
> RADIUS
> RIP
> SYSLOG
> TFTP

Usage: Valid values are as follows:

- Yes—Generates UDP checksums for queries and responses for protocols that use UDP. This is the default.
- No—Disables UDP checksums.

Example: set udp-cksum = yes

Dependencies: You might want to enable UDP-Cksum if data integrity is of the highest concern for your environment, and having redundant checks is important. This setting is also appropriate if your UDP-based servers are located on the remote side of a WAN link that is prone to errors.

Location: IP-Global

UDP-Port

Description: Specifies a UDP port as follows:

- In an ATMP profile, specifies the User Datagram Protocol (UDP) port that the Stinger unit uses locally to manage the Ascend Tunnel Management Protocol (ATMP) tunnel.

- In a Connection profile, sets the default UDP port to use when communicating with a Home Agent.

- In a Stacking profile, specifies the UDP port number to use for intrastack control packets.

Usage: Specify a UDP port number. The default is 5150. When you use the value for a tunnel, both ends of the tunnel must agree on the number. When you use the value for a stack, all members of the stack must use the same UDP port number. Multiple stacks can specify the same port number, because the port does not have to be unique to a stack.

Example: `set udp-port = 5100`

Dependencies: In a Connection profile, you can override the value of UDP-Port by specifying a UDP port in the Primary-Tunnel-Server or Secondary-Tunnel-Server setting. If you change the UDP-Port setting, the new value does not take effect until you reset the system.

Location: ATMP, Connection station > Tunnel-Options

See Also: Data-IP-Address, Password

UDS3

Description: *Not currently used.* Specifies the action to take when the code image for an unchannelized DS3 card is present in a tar file.

Usage: Valid values are as follows:

Usage: Specify one of the following settings:

- `Auto`—Causes the system to load images for cards that are installed in the Stinger unit, and to skip images for cards that are not installed. This is the default.

- `Load`—Causes the system to load the image, even if there is no card of that type installed.

- `Skip`—Causes the system to skip the image, even if there is a card of that type installed.

Dependencies: A card is considered present in the system if a Slot-Type profile exists for that card type. The system creates a Slot-Type profile when it first detects the presence of a card, and does not delete the profile unless the administrator uses the Slot –r command to permanently remove a card that is no longer installed in the system, or clears NVRAM. To ensure that the system does not load unnecessary images, use Slot –r to remove Slot-Type profiles for cards that are no longer installed in the system.

Location: Load-Select, DS3-ATM

See Also: Detect-End-Of-Packet, Force-56Kbps, Host, HostN, Port, Facility, Host, Immediate-Mode-Options, Save-Number, Service, Syslog-Enabled, Enet2, SDSL, Unknown-Cards

Unavailable-Second

Description: Indicates the number of 1-second intervals for which the HDSL2 line is unavailable. The HDSL2 line becomes unavailable at the onset of 10 contiguous severely errored seconds (SESs). Once unavailable, the HDSL2 line becomes available at the onset of 10 contiguous seconds with no SESs.

Permission level: 1

Usage: Valid range for this read-only value is from

Example: `unavailable-second = 0`

Location: HDSL2-Stat { shelf-*N* slot-*N N* } > physical-statistic

Location: Errored-Second, Severely-Errored-Second, LOSW-Second

Unavailable-Secs

Description: Indicates the count of one second intervals where the inverse multiplexing ATM (IMA) group traffic state machine is down in the current 15 minutes interval.

Usage: Valid range is from zero (0) to 2147483647.

Example: `unavailable-secs = 56`

Location: IMA-Group-Stat *name* > Ima-Group-Statistic

See Also: Far-End-Num-Failures, Far-End-Rx-Failure-Status

Unit-Type

Description: Specifies the operating mode of the symmetric digital subscriber line (SDSL) card.

Usage: In the AL-DMT-Stat and SDSL-Stat profile, the Unit-Type setting is read only. It can have one of the following values:

- `coe`—Central Office Equipment
- `cpe`—Customer Premises Equipment

In an SDSL profile, you must set the Unit-Type value to COE.

Example: `unit-type = cpe`

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Status,
SDSL {shelf-*N* slot-*N N*} > Line-Config, SDSL-Stat {shelf-*N* slot-*N N*} > Physical-Status

See Also: Dev-Line-State, Hardware-Ver, Major-Firmware-Ver, Minor-Firmware-Ver, Physical-Address

Unknown-Cards

Description: Specifies the action to take when the code image for newly supported cards is present in a Tar file.

Usage: Valid values are as follows:

*   `auto`—Load code image if there is a card installed of that type. Otherwise, skip it. This is the default.
*   `load`—Load code image when present in tar file
*   `skip`—Skip code image when present in tar file

Example: `unknown cards = auto`

Dependencies: A module is considered present in the system if a Slot-Type profile exists for that module type. The system creates a Slot-Type profile when it first detects the presence of a module, and does not delete the profile unless the administrator uses the Slot –r command to permanently remove a module that is no longer installed in the system, or clears NVRAM. To ensure that the system does not load unnecessary images, use Slot –r to remove Slot-Type profiles for modules that are no longer installed in the system.

Location: Load-Select

See Also: DS3-ATM, Detect-End-Of-Packet, Force-56Kbps, Host, HostN, Port, Facility, Host, Immediate-Mode-Options, Save-Number, Service, Syslog-Enabled, Enet2, SDSL

Update-Threshold

Description: Specifies the update threshold on the Simple Network Time Protocol (SNTP) server, in seconds.

Usage: Specify the number of seconds from zero (0) to 2147483647.

Example: update-threshold = 10

Dependencies: This field is only applied if the enabled parameter in the sntp-info subprofile is set to passive.

Location: IP-GLOBAL:sntp-info

See Also: GMT-Offset, SNTP command

Up-Down-Cntr

Description: Indicates the number of times the link has gone from an up state to a down state since the module was last reset.

Usage: The Up-Down-Cntr setting is read only.

Example: `up-down-cntr = 0`

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Statistic,
SDSL-Stat {shelf-*N* slot-*N N*} > Physical-Statistic

See Also: Far-End-dB-Attenuation, Line-Up-Timer, Rx-Signal-Present, Self-Test

Up-Down-Threshold

Description: Specifies the number of times during the specified
`error-averaging-period` that the line is brought up and down by the modem before the
modem is considered nonfunctional.

Usage: The default value is 3 counts.

Example: `up-down-threshold = 3`

Location: LIM-Sparing-Config > Auto-Lim-Sparing-Config > Lim-Sparing-Config

See Also: Error-Averaging-Period, Error-Threshold, Modem-Failure-Threshold

Up-Status

Description: Indicates the status of a device.

Usage: The Up-Status parameter is read only. Valid values are as follows:

- `Idle-Up-Status`—Indicates that the device is not currently in use.
- `Reserved-Up-Status`—Indicates that the device is not currently in use and should
  not be used until all idle devices of the same type are in use.
- `Assigned-Up-Status`—Indicates that the device is in use.

Example: `up-status = idle-up-status`

Location: Device-State {{shelf-*N* slot-*N N*} *N*}

See Also: Device-Address, Device-State, Reqd-State

UpStream-End-Bin

Description: Specifies the ending frequency bin for upstream transmission.

Usage: Valid range is 0 to 31 for 12- and 24-port link interface modules (LIMs) and 6 -31 for
48-port LIMs. The default value is 31.

Example: `upstream-end-bin = 31`

Location: AL-DMT { any-shelf any-slot *N* }

See Also: Downstream-End-Bin, Downstream-Start-Bin, UpStream-Start-Bin

Up-Stream-Latency

Description: Indicates the operational upstream latency.

Usage: The Up-Stream-Latency parameter is read only. Valid values are as follows:

- `none`— Indicates that the line is not operational.
- `fast`— Indicates that the setting for the least up stream latency is in effect.
- `interleave`— Indicates that the interleave latency (greater than fast) is in effect.

Example: `up-stream-latency = fast`

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Status

See Also: Down-Stream-Latency

Up-Stream-Rate

Description: Indicates the upstream data rate for the symmetric digital subscriber line (SDSL) interface in bits per second.

Usage: The Up-Stream-Rate Parameter is read only. A value of 0 (zero) indicates that the data rate is unknown.

Example: `up-stream-rate = 0`

Dependencies: SDSL interfaces ensure maximum throughput for the particular condition of the line. The better the line quality, the higher the data rate.

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Status,
SDSL-Stat {shelf-*N* slot-*N N*} > Physical-Status

See Also: Down-Stream-Rate-Fast

Up-Stream-Rate-Fast

Description: Indicates the upstream data rate in bits per second when up stream latency has a value of `fast`.

Usage: A value of zero means that latency is set to `interleave` or the data rate is unknown.

Example: `up-stream-rate-fast = 0`

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Status

See Also: Down-Stream-Rate-Interleave, Down-Stream-Latency, Up-Stream-Latency, Up-Stream-Rate-Interleave

Up-Stream-Rate-Interleave

Description: Indicates th upstream data rate in bits per second when up stream latency has a value of `interleave`.

Usage: A value of zero means that latency is set to `fast` or the data rate is unknown.

Example: `Down-Stream-Rate-Interleave = 0`

Location: AL-DMT-Stat {shelf-*N* slot-*N N*} > Physical-Status

See Also: Down-Stream-Rate-Interleave, Down-Stream-Latency, Up-Stream-Latency, Up-Stream-Rate-Interleave

UpStream-Start-Bin

Description: Specifies the starting frequency bin for upstream transmission.

Usage: Valid range is 0 to 31 for 12- and 24-port LIMs and 6 -31 for 48-port link interface modules (LIMs). The default value is 6.

Example: `set upstream-Start-bin = 31`

Location: AL-DMT { any-shelf any-slot *N*}

See Also: Downstream-End-Bin, Downstream-Start-Bin, GMT-Offset, SNTP command

Use-Answer-For-All-Defaults

Usage: Specifies whether values in the Answer-Defaults profile should override values in the default Internet profile when the Stinger unit uses RADIUS to validate an incoming call.

Usage: Valid values are as follows:

- `Yes`—Specifies that the Stinger unit to use the Answer-Defaults profile for defaults. When you specify Yes, the Stinger unit falls back to the values specified in the Answer-Defaults profile for options that are not specified in a given external authentication profile.This is the default.

- `No`—Specifies that the Stinger unit uses the default Internet profile for defaults. When you specify No, the Stinger unit uses defaults for options not specified in a given external authentication profile.

Example: `set use-answer-for-all-defaults = no`

Location: Answer-Defaults

See Also: Profiles-Required

Use-Exceeded-Enabled

Description: Specifies whether the system generates a trap when either a specific port has exceeded the number of DS0 minutes allocated to it or the system DS0 usage has been exceeded.

Usage: Valid values are as follows:

- `Yes`—Specifies that the system generates a trap when a specific port has exceeded the number of DS0 minutes allocated to it, or the system DS0 usage has been exceeded. This is the default.

- `No`—Specifies that the system does not generate a trap when a specific port has exceeded the number of DS0 minutes allocated to it, or the system DS0 usage has been exceeded.

Example: `set use-exceeded-enabled = no`

Location: Trap *host-name*

See Also: Port-Enabled

User (profile)

Description: A profile that defines a name, a password, privileges, and default displays for user login accounts.

Usage: Use the Read and List commands to make User the working profile and list its contents. For example:

```
admin> read user default
USER/default read

admin> list
[in USER/default]
name*=default
password=""
active-enabled=yes
allow-termserv=no
allow-system=no
allow-diagnostic=no
allow-update=no
allow-password=no
allow-code=no
idle-logout=0
prompt="admin> "
default-status=no
top-status=general-info
bottom-status=log-window
left-status=connection-list
use-scroll-regions=yes
log-display-level=none
screen-length=24
status-length=18
```

You can then use the Set command to modify the settings in the profile. To close the profile and save your changes:

```
admin> write
USER/default written
```

See Also: Active-Enabled, Allow-Code, Allow-Diagnostic, Allow-Password, Allow-System, Allow-Termserv, Allow-Update, Bottom-Status, Default-Status, Idle-Logout, Log-Display-Level, Nailed-Up-Group, Password, Prompt, Screen-Length, Status-Length, Use-Scroll-Regions

User-Profile

Description: In the IP-Global profile, specifies the name of the default User profile associated with Telnet sessions. In a Serial profile, specifies the name of the default User profile associated with serial access to the Stinger unit command interface. In an Error profile, indicates the name of the user that reset the unit.

Usage: In the IP-Global or Serial profile, specify the name of a User profile. For the IP-Global profile, the default is null. For the Serial profile, the default is admin. In either profile, a null value specifies that the user must log in explicitly. In an Error profile, the User-Profile setting is read only.

Example: `set user-profile = default`

Location: Error, IP-Global, Serial {shelf-*N* slot-*N N*}

See Also: Index, IP-Address, IS-Post,Loadname, Stack-Trace

Userstat-Format

Description: Customizes the output of the Userstat command.

Usage: Specify a series of conversion strings. You can enter up to 72 characters. The maximum width of the output string depends on the width of the fields present in the session listing output. If you enter a character without a percent sign, it is printed as a literal character in the session-listing output. You can enter one or more of the following strings:

String	Field width	Output text	Meaning
%i	10	SessionID	Unique ID assigned to the session
%l	10	Line/Chan	Physical address (shelf.slot.line/chan)
%s	11	Slot:Item	Shelf:slot:item/logical-item of the host port
%r	11	Tx/Rx Rate	Transmit and receive rates
%d	3	Svc	A three-letter code showing the type of service
%a	15	Address	IP address
%u	14	Username	Connection profile name
%c	10	ConnTime	Amount of time connected, in hours:minutes:seconds
%t	10	IdleTime	Amount of time idle, hours:minutes:seconds
%n	24	Dialed#	Number dialed if known

The default value of Userstat-Format causes the standard session-listing output format for the Userstat command.

Example: An administrator customizes the session-listing output to include only the Username, Svc, and ConnTime information, and enters an at sign between the service and connection time for each session:

```
admin> read system
SYSTEM read

admin> set userstat-format = %u (%d) @ %c

admin> write
SYSTEM written

admin> userstat

Username        Svc    ConnTime

joeb           (TCP) @ 1:22:34
jimmyq         (TCP) @ 3:44:19
sallyg         (TCP) @ 5:12:56

<end user list>  3 active user(s)
```

Location: System

See Also: Userstat command

Use-Scroll-Regions

Description: Specifies whether the VT100 scroll-region commands are used to reduce screen redraws when the status screen is displayed.

Usage: Valid values are as follows:

- `Yes`—Specifies that the VT100 scroll-region commands are used to reduce screen redraws. This is the default.
- `No`—Specifies that the VT100 scroll-region commands is disabled. If the status screen is not redrawing properly, try setting Use-Scroll-Regions to No.

Example: `set use-scroll-regions = yes`

Location: User *name*

See Also: Bottom-Status, Default-Status

Use-Trunk-Groups

Description: Enables or disables the use of trunk groups for all network lines. When trunk groups are enabled, channels must be assigned trunk-group numbers.

Usage: Valid values are as follows:

- `Yes`—Specifies that all channels must be assigned a trunk group number for outgoing calls.
- `Yes`—Specifies that trunk groups are not used for network lines. This is the default.

Example: `set use-trunk-groups = yes`

Dependencies: When Use-Trunk-Groups=Yes, the channel configuration must specify Trunk-Group assignments.

Location: System

See Also: Dial-Number

Usr-Dn-Stream-Contract

Description: Specifies the traffic contract name for the downstream traffic on an Asynchronous Transfer Mode (ATM) circuit.

Usage: Specify a text string of up to 30 characters. The default is null.

Example: `set usr-dn-stream-contract = avalon1`

Location: Connection > ATM-QoS-Options

See Also: Usr-Up-Stream-Contract

UsrRad-Options

Description: A subprofile that defines connection-specific RADIUS accounting options.

Usage: With a Connection profile as the working profile, list the UsrRad-Options subprofile. For example:

```
admin> list usrRad-options
[in CONNECTION/tim:usrRad-options]
acct-type=global
acct-host=0.0.0.0
acct-port=1646
acct-key=""
acct-timeout=1
acct-id-base=acct-base-10
```

You can then use the Set command to modify the settings in the subprofile. To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Dependencies: RADIUS accounting must be configured in the Rad-Acct-Client subprofile of the External-Auth profile.

Location: Connection *station*

See Also: Acct-Host, Acct-ID-Base, Acct-Key, Acct-Port, Acct-Timeout, Acct-Type, Rad-Acct-Client

Usr-Up-Stream-Contract

Description: Specifies the traffic contract name for the upstream traffic on the Asynchronous Transfer Mode (ATM) circuit.

Usage: Specify a text string of up to 30 characters. The default is null.

Example: set usr-up-stream-contract = avalon1

Location: Connection > ATM-QoS-Options

See Also: Usr-Dn-Stream-Contract

Ustat-Rsp-To-Poll

Description: Enables/disables sending of a USTAT message in response to a poll indicating an out of sequence protocol data unit (PDU).

Usage: Disabled by default.

Location: ATM-If-Sig-Params *N* > Qsaal-Options

V

V42/MNP

Description: Specifies how digital modems negotiate Link Access Procedure for Modem / Microcom Networking Protocol (LAPM/MNP) error control with the analog modem at the other end of the connection.

Usage: Valid values are as follows:

- `Will-V42`—Specifies that the modems request LAPM/MNP, but accept the call if it is not provided. This is the default.
- `Wont-V42`—Specifies that the modems do not use LAPM/MNP at all.
- `Must-V42`—Specifies that the modems request LAPM/MNP, and drop the call if it is not provided.

Example: `v42/mnp = will-v42`

Dependencies: If terminal services are disabled, V42/MNP does not apply.

Location: Terminal-Server > Modem-Configuration

See Also: Modem-Configuration

Valid-Cell-Counter

Description: Indicates the total number of valid cells received by the unit.

Usage: The Valid-Cell-Counter value is read only.

Example: valid-cell-counter = 0

Location: OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: Idle-Cell-Counter

Valid-Intervals

Description: Indicates the number of previous 15 minute intervals for which valid data was collected.

Usage: Valid range for this read-only parameter is from zero to 96. The value is 96 unless the inverse multiplexing ATM (IMA) link was added to the IMA group within the last 24 hours, in which case the value is the number of complete 15 minute intervals since the link was added to an IMA group.

Example: valid-intervals = 96

Location: DS1-ATM-Stat { shelf-*N* slot-*N N*} > Ima-Link-Status

See Also: Far-End-Rx-Failure-Status, Invalid-Intervals, Relative-Delay

VCC-Ident

Description: A subprofile that indicates read-only values for a virtual channel connection (VCC) on an Asynchronous Transfer Mode (ATM) link.

Usage: With an ATMVCC-Stat profile as the working profile, list the VCC-Ident subprofile. For example:

```
admin> list vcc-ident
[in ATMVCC-STAT/{ shelf-1 slot-4 1 0 32 }:vcc-ident]
slot-number=slot-4
port=1
vpi=0
vci=32
```

To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: ATMVCC-Stat *circuit-name*

See Also: Port, Slot-Number, VCI, VPI

VCC-Members

Description: A subprofile that contains read-only values for the virtual channel connections (VCCs) on an Asynchronous Transfer Mode (ATM) link.

Usage: With an ATMPVC-Stat profile as the working profile, enter **list vcc-members** to display the VCC-Members subprofile. For example:

```
admin> list vcc-members
[in ATMPVC-STAT/unit1:vcc-members]
vcc-members[1]={ shelf-1 slot-2 14 0 37 }
vcc-members[2]={ shelf-1 trunk-module-2 2 0 10
```

To close the VCC-Members subprofile and return to a higher context in the profile:

```
admin> list ..
```

Location: ATMPVC-Stat *circuit-name*

See Also: VCC-Members N

VCC-Members *N*

Description: A subprofile of the VCC-Members subprofile. VCC-Members *N* contains read-only values for a virtual channel connection (VCC) on an Asynchronous Transfer Mode (ATM) link.

Usage: With an ATMPVC-Stat profile as the working profile, use the List command to display the configuration for one of the virtual channel connections (VCCs). For example:

Example:

```
admin> list 1
[in ATMPVC-STAT/unit1:vcc-members[1]]
slot-number=slot-2
port=14
vpi=0
vci=37
```

To close the subprofile and return to a higher context in the working profile:

```
admin> list ..
```

Location: ATMPVC-Stat *circuit-name* > VCC-Members

See Also: Port, Slot-Number, VCI, VPI

VCC-Type

Description: Indicates the type of the virtual channel connection (VCC) on an Asynchronous Transfer Mode (ATM) link.

Usage: Valid values are as follows:

- `connecting`—Indicates that the VCC is a point-to-point connection.
- `terminating`—Indicates that the VCC terminates on this platform.

Example: `vcc-type = connecting`

Location: ATMPVC-Stat *circuit-name*, ATMVCC-Stat *circuit-name*

See Also: PVC-Type

VC-Fault-Management

Description: *Not currently used.* Specifies the virtual circuit fault management type.

Usage: When this parameter becomes available valid values will be as follows:

- `none`— no fault management is performed on the virtual circuit. This is the default.
- `segment loopback`— the system sends anOAM F5 segment loopback cell to the remote device every 5 seconds.
- `end-to-end-loopback`— the system sends an OAM F5 end-to-end loopback cell to the remote device every 5 seconds.

Example: `vc-fault-management = none`

Location: Connection *station* > Atm-Connect-Options

See Also: OAM-Support, SPVC-Retry-Limit, VC-Max-Loopback-Cell-Loss

VCI

Description: Specifies or indicates the virtual channel identifier (VCI) for an Asynchronous Transfer Mode (ATM) link.

Usage: In an ATM-Options or ATM-Connect-Options subprofile, specify a number from 1 to 32767. The VCI value in the ATM-Options subprofile specifies the first side of the circuit. The VCI value in the ATM-Connect-Options subprofile specifies the second side of the circuit. In the ATMPVC-Stat and ATMVCC-Stat profiles, the VCI value is read only.

Example: `vci = 707`

Location: Connection > ATM-Options, Connection > ATM-Connect-Options
ATMPVC-Stat *circuit-name* > VCC-Members > VCC-Members *N*,
ATMVCC-Stat *circuit-name* > VCC-Ident, Connection > ATM-Options

See Also: VPI

VC-Max-Loopback-Cell-Loss

Description: *Not currently used.* Specifies the number of consecutive loopback cells that can be lost before the system clears the connection. When a PVC is cleared, the interface is in an inactive state until the system can reestablish the connection.

Usage: The default is 1. When this parameter becomes available you will be able to specify a different value.

Example: `vc-max-loopback-cell-loss = 1`

Location: Connection *station* > Atm-Connect-Options

See Also: OAM-Support, SPVC-Retry-Limit, VC-Fault-Management

VC-Switching-VPI

Description: Specifies the virtual path identifiers (VPIs), in addition to VPI 0, that the system uses for virtual channel (VC) switching.

Usage: Specify a VPI for each field in the array. The default is 0 (zero).

Example: `set vc-switching-vpi 1 = 50`

Dependencies: Consider the following:

- All VC-switching VPIs have a valid range specified by VPI-VCI-Range. All other VPIs are used for VP switching.

- Adding a VPI to a list of VC-switching VPIs causes the system to allocate more VCCs for this port. You must make sure that the number of VCCs for other ports has been reduced to accommodate the increase in VCCs, because the system can support VCCs up to a limit of 32K on all trunk ports combined.

  For example, if the VPI-VCI-Range is 4K, and VPI 0 is the only VPI allocated for VC switching for this port, then the port occupies 4K. If you add VPI 1 to the list of VPIs allocated for VC switching, a total of 8K is allocated for the port.

- Any change you make to a list of VPIs is effective immediately. In order to make the change, the system drops and re-establishes all connections.

Location: DS3-ATM {shelf-*N* slot-*N N*} > Line-Config
OC3-ATM {shelf-*N* trunk-module-*N N*} > Line-Config

VJ-Header-Prediction

Description: Specifies whether Van Jacobson IP header compression should be negotiated on incoming calls.

Usage: Valid values are as follows:

- `Yes`—Enables VJ compression for TCP packets. This is the default.
- `No`—Disables VJ compression for TCP packets.

Example: `set vj-header-prediction = no`

Location: Answer-Defaults > IP-Answer, Connection *station* > IP-Options

See Also: IP-Options

Voice-Detection

Description: The numeric value indicating result of test in a copper loop test (CLT).

Usage: Valid values are

- `1`—Voice signal not detected.
- `2`—Voice signal detected.
- `3`—Steady state indicates possible data traffic.
- `4`—nterrupted tone detected: 60 or 120 IPM.

Example: `voice-detection = 1`

Location: CLT-Result

See Also: CLTcmd, CLT-Command (profile), First-Coil-Location, Short-Location, Voice-Detection

VP-Capability

Description: Specifies whether a virtual private channel (VPC) can be established from the advertising node to the reachable address prefix.

Usage: The default, false, indicates that VPCs cannot be established.

Example: `set vp-capability = true`

Location: PNNI-Route-Addr

See Also: Adv-Node-Id, Adv-Port-Id, Originate-Advert, PNNI-Scope, PTSE-Id-PTSE-Id

VPI

Description: Specifies or indicates the virtual path identifier (VPI) for an Asynchronous Transfer Mode (ATM) link.

Usage: In an ATM-Options subprofile specify a number from 1 to 32767. In the ATM-Connect-Options subprofile, specify a number from 0 to 255. The default is 0 (zero), which causes the unit to use VC switching. Note the following:

• The VPI value in the ATM-Options subprofile specifies the first side of the circuit.

• The VPI value in the ATM-Connect-Options subprofile specifies the second side of the circuit.

• The VPI value in the Outgoing-Shaper subprofile specifies the VPI of the path whose traffic is shaped.

In the ATMPVC-Stat and ATMVCC-Stat profiles, the VPI value is read only.

Location: Connection > ATM-Options, Connection > ATM-Connect-Options, ATMPVC-Stat *circuit-name*, ATMVCC-Stat *circuit-name,* Controller-Static-Config > Atm-Parameters > outgoing-Shaper

See Also: VCI

VPI-VCI-Range

Description: Specifies a vrtual path identifier/virtual channel identifier (VPI/VCI) range.

Usage: You can use the VPI-VCI-Range value to select the best combination of VPI and VCI bit sizes to fit the list of supported VPI/VCI pairs obtained from the network provider. The new values take effect as soon as you write the profile. Following are the possible values:

Value	VPI range	VCI range
VPI-0-255-VCI-32-255	0-255	32-255
VPI-0-255-VCI-32-511	0-255	32-511
VPI-0-255-VCI-32-1023	0-255	32-1023
VPI-0-255-VCI-32-2047	0-255	32-2047
VPI-0-255-VCI-32-4095	0-255	32-4095
VPI-0-255-VCI-32-8191	0-255	32-8191
VPI-0-255-VCI-32-16383	0-255	32-16383

Dependencies: Consider the following

• Before setting the VPI-VCI-Range value, make sure that there is only one VC-switching VPI for the port, and that the rest of the trunk ports in the system use less than 16K for the VCC. The system can handle a maximum 32K VCC for all trunk ports combined.

• The VCI range is valid only for VPIs assigned for VC switching by the VC-Switching-VPI setting. VPI 0 is always used for the VCC. There are no restrictions on the VCI range for VPIs that use VP switching.

- Exercise caution when changing the value of VPI-VCI-Range. Any increase in the range requires the unit to reserve more VCCs for the port, and all VPIs assigned for VC switching reserve the range. Therefore, the VCC numbers for the port increase with the number of VPIs assigned for the VCC.

- Be very careful when changing the value of VPI-VCI-Range. In order to make the new range effective, the system drops all connections on the system.

See Also: AL-DMT { shelf-*N* slot-*N N* }, DS3-ATM {shelf-*N* slot-*N N*} > Line-Config, OC3-ATM {shelf-*N* trunk-module-*N N*} > Line-Config

See Also: VCI, VPI

VP-Switching

Description: Enables/disables VP switching for the first side of the circuit.

Usage: The default value is No. If this parameter is set to Yes, you must enable VP switching on both sides of the circuit and specify a valid VPI number for each side. For details about VP switching, see the *Stinger ATM Configuration Guide* and the *Stinger Private Network-to-Network Interface (PNNI) Supplement*.

Example: `vp-switching = no`

Location: Connection (profile)

See Also: VP-Switching-VPI, VPI

VP-Switching-VPI

Description: Specifies the virtual path identifiers (VPIs) that the system uses for VP switching on the line interface module (LIM) port.

Usage: Specify a VPI from 1 to 31. The default is 15.

Example: `set vp-switching-vpi = 1`

Dependencies: Consider the following:

- All VP-switching VPIs have a valid range specified by VPI-VCI-Range. All other VPIs are used for VC switching.

- Any change you make to a list of VPIs is effective immediately. In order to make the change, the system drops and reestablishes all connections on the LIM.

Location: AL-DMT {shelf-*N* slot-*N N*} > Line-Config
SDSL {shelf-*N* trunk-module-*N N*} > Line-Config

See Also: VPI, VPI-VCI-RangeVPI, VPI-VCI-Range

W

Warmstart-Enabled

Description: Specifies whether the Stinger unit generates a trap when the unit reinitializes itself in such a way that neither the configuration of the SNMP manager nor of the unit itself is altered.

Usage: Valid values are as follows:

*   `Yes`—Specifies that the system generates a trap when the Stinger unit reinitializes itself so that neither the configuration of the SNMP manager nor of the system itself is altered. This is the default.
*   `No`—Specifies that the system does not generates a trap when the Stinger unit reinitializes itself so that neither the configuration of the SNMP manager nor of the system itself is altered.

Example: `set warmstart = no`

Location: Trap *host-name*

See Also: Coldstart-Enabled

Watchdog-Warning-Enabled

Description: Specifies whether the SNMP watchdog-warning trap is enabled.

Usage: Valid values are as follows:

*   `Yes`—Specifies that the SNMP watchdog-warning trap is enabled. This is the default.
*   `No`—Specifies that the SNMP watchdog-warning trap is disabled.

Example: `set watchdog-warning-enabled = no`

Location: Trap *name*

See Also: Sys-Clock-Drift-Enabled

Window-Size

Description: Specifies the size of the Q.SAAL window. (The signaling ATM adaptation layer (SAAL) provides reliable transport of q.2931 messages). Window size is typically related to an interval at which packets can be received or retransmitted. Standard algorithms are used to adjust window size according to network conditions.

Usage: Valid values are from 16 to 128. The default value is 64.

Example: `set window-size = 50`

Location: ATM-IF-SIG-PARAMS/0:qsaal-options

See Also: Max-Cc, Max-Pd, Max-Stat, Poll-After-Retransmission, Repeat-Ustat, Ustat-Rsp-To-Poll

Write-Access-Hosts

Description: Specifies up to five IP addresses of SNMP managers that have SNMP write permission. The Stinger unit responds to SNMP Set, Get, and Get-Next commands from only the SNMP managers you specify.

Usage: Each element in the array can specify an IP address. With SNMP as the working profile, use the List command to display the array elements.

Example:

```
admin> list write-access-hosts
[in SNMP:write-access-hosts]
write-access-hosts[1]=0.0.0.0
write-access-hosts[2]=0.0.0.0
write-access-hosts[3]=0.0.0.0
write-access-hosts[4]=0.0.0.0
write-access-hosts[5]=0.0.0.0
```

You can then set a Write-Access-Hosts value by specifying its numeric index and entering an address. For example:

```
admin> set 1 10.2.3.4/24
```

Or, you can set an array element without first listing the array. For example:

```
admin> set write-access-hosts 1 10.2.3.4/24
```

or

```
admin> set write-access-hosts 2=10.5.6.7/29
```

Dependencies: For Write-Access-Hosts to restrict read-write access to the Stinger unit, you must set Enforce-Address-Security to Yes.

Location: SNMP

See Also: Enable, Read-Access-Hosts, Read-Community, Read-Write-Access

X

XDSL-Slot-Config (profile)

Description: This profile is used to configure an xDSL slot.

Usage: Use the dir, read, and list commands to make this the current profile.

Example:

```
default> dir xdsl-slot
3  09/21/2000 08:19:29  { any-shelf any-slot 0 }
default> read xdsl-s { any-shelf any-slot 0 }
XDSL-SLOT-CONFIG { any-shelf any-slot 0 } read
default> list
[in XDSL-SLOT-CONFIG/{ any-shelf any-slot 0 }]
slot-address* = { any-shelf any-slot 0 }
sealing-current-on = no
```

Y

Yellow-Receive

Description: Indicates whether the local device has received a loss-of-frame (Yellow Alarm) indication. A Yellow Alarm indicates that a device on the line has detected framing errors in the signal.

Usage: Valid values for this read-only setting are:

- `true`—Indicates that the local device has received a Yellow Alarm indication.
- `false`—Indicates that the local device has not received a Yellow Alarm indication.

Example: `yellow-receive = true`

Location: DS3-ATM {shelf-*N* slot-*N N*}, OC3-ATM-Stat {shelf-*N* trunk-module-*N N*}

See Also: AIS-Receive

Progress and Disconnect Codes

<div style="text-align: right">*3*</div>

Progress codes

Table 3-1 explains the progress codes.

Table 3-1. Progress codes

Code	Explanation
0	No progress.
1	Not applicable.
2	The progress of the call is unknown.
10	The call is up.
40	The terminal-server session has started up.
41	The Stinger unit is establishing the TCP connection.
42	The Stinger unit is establishing the immediate Telnet connection.
43	The Stinger unit has established a raw TCP session with the host. This code does not imply that the user has logged into the host.7
44	The Stinger unit has established an immediate Telnet connection with the host. This code does not imply that the user has logged into the host.
45	The Stinger unit is establishing an Rlogin session.
46	The Stinger unit has established an Rlogin session with the host. This code does not imply that the user has logged into the host.
47	Terminal-server authentication has begun.
60	The LAN session is up.
61	LCP negotiations are allowed.

Table 3-1. Progress codes (continued)

Code	Explanation
62	CCP negotiations are allowed.
63	IPNCP negotiations are allowed.
65	LCP is in the Open state.
66	CCP is in the Open state.
67	IPNCP is in the Open state.
68	BNCP is in the Open state.
69	LCP is in the Initial state.
70	LCP is in the Starting state.
71	LCP is in the Closed state.
72	LCP is in the Stopped state.
73	LCP is in the Closing state.
74	LCP is in the Stopping state.
75	LCP is in the Request Sent state.
76	LCP is in the ACK Received state.
77	LCP is in the ACK Sent state.
82	BACP is being opened.
83	BACP is in an Open state.
84	CBCP is being opened.
85	CBCP is in an Open state.
90	The unit has accepted a V.110 call.
91	The V.110 call is in an Open state.
92	The V.110 call is in a carrier state.
93	The V.110 call is in a reset state.
94	The V.110 call is in a closed state.
100	The unit has determined that the call requires callback.
101	Authentication failed.

Table 3-1. Progress codes (continued)

Code	Explanation
102	The remote authentication server timed out.

Disconnect-cause codes

Table 3-2 explains the disconnect-cause codes.

Table 3-2. Disconnect-cause codes

Code	Description
1	This value is not applied to any call.
2	The disconnect occurred for an unknown reason.
3	The call was disconnected.
4	CLID authentication failed.
5	A RADIUS timeout occurred during authentication.
6	Authentication was successful. The unit is configured to call back the user.
7	The Pre-T310 Send Disc timer was triggered.
20	The user exited normally from the terminal server.
21	The terminal server timed out waiting for user input.
22	A forced disconnect occurred when the user exited a Telnet session.
23	No IP address was available when the user entered the SLIP command.
24	A forced disconnect occurred when the user exited a raw TCP session.
25	The user exceeded the limit for login attempts.
26	The unit attempted to start a raw TCP session, but raw TCP is disabled.
27	Control-C characters were received during the login.
28	The terminal-server session cleared ungracefully.
29	The user closed a terminal-server virtual connection normally.
30	The terminal-server virtual connection cleared ungracefully.

Table 3-2. Disconnect-cause codes (continued)

Code	Description
31	The user exited from an Rlogin session.
32	The establishment of the Rlogin session failed because of bad options.
33	The unit lacks the resources to process a terminal-server request.
35	The MP+ session cleared because no null MP packets were received. A unit sends (and should receive) null MP packets throughout an MP+ session.
40	LCP timed out waiting for a response.
41	LCP negotiations failed, probably because the user is configured to send passwords by means of PAP, and the unit is configured to accept passwords by means of CHAP (or vice versa).
42	PAP authentication failed.
43	CHAP authentication failed.
44	Authentication failed from a remote server.
45	The unit received a Terminate Request packet while LCP was in an open state.
46	The unit received a Close Request from an upper layer, indicating graceful LCP closure.
47	The unit cleared the call because no Network Core Protocols (NCPs) were successfully negotiated. Typically, there is no agreement on the type of routing or bridging that is supported for the session.
48	An MP session was disconnected. The unit accepted an added channel, but cannot determine to which call to add the new channel.
49	The unit disconnected an MP call because no more channels could be added.
50	Telnet or raw TCP session tables are full.
51	The unit has exhausted Telnet or raw TCP resources.
52	For a Telnet or raw TCP session, the IP address is invalid.
53	The unit cannot resolve the host name for a Telnet or raw TCP session.
54	For a Telnet or raw TCP session, the unit received a bad or missing port number.
60	For a Telnet or raw TCP session, the host was reset.

Table 3-2. Disconnect-cause codes (continued)

Code	Description
61	For a Telnet or raw TCP session, the connection was refused.
62	For a Telnet or raw TCP session, the connection timed out.
63	For a Telnet or raw TCP session, the connection was closed by a foreign host.
64	For a Telnet or raw TCP session, the network was unreachable.
65	For a Telnet or raw TCP session, the host was unreachable.
66	For a Telnet or raw TCP session, the network admin was unreachable.
67	For a Telnet or raw TCP session, the host admin was unreachable.
68	For a Telnet or raw TCP session, the port was unreachable.
100	The session timed out.
101	The user name was invalid.
102	Callback is enabled.
115	The dial-in user is no longer active.
120	A requested protocol is disabled or unsupported.
150	A disconnect was requested by the RADIUS server.
151	The call was disconnected by the local administrator.
152	The call was disconnected by means of SNMP.
160	The unit exceeded the maximum number of V.110 retries.
170	A timeout occurred while the unit waited for the remote device to be authenticated.
180	The user disconnected the call.
181	The call was cleared by the system.
185	The signal was lost from remote end, probably because the remote end's modem was turned off.
190	The resource has been quiesced.
195	The maximum duration for the call has been reached.
201	The unit has low memory.
220	The unit requires CBCP, but client does not support it.

Table 3-2. Disconnect-cause codes (continued)

Code	Description
230	The unit deleted the Virtual Router (VRouter).
240	The unit disconnected the call on the basis of LQM measurements.
241	The unit cleared a backup call.

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