GranDSLAM™ 4200
ATM Stackable DSLAM

User's Guide

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PARADYNE®

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About This Guide

Document Purpose and Intended Audience

This guide contains information necessary for the use of the GranDSLAM 4200 ATM Stackable DSLAM.

The successful user of this manual has some experience with the installation and configuration of DSL network devices, and Transaction Language No. (TL1) commands.

Document Summary

Section	Description
Chapter 1, *Introduction to the Hotwire 4200 GranDSLAM*	Provides an introduction to the capabilities of the Hotwire 4200 GranDSLAM.
Chapter 2, *Using the Command Line Interface*	Explains how to use the Command Line Interface (CLI).
Chapter 3, *ADSL Facility Commands*	Contains commands for configuring and viewing the ADSL facility.
Chapter 4, *DS1 Facility Commands*	Contains commands for configuring and viewing the DS1 facility.
Chapter 5, *ATM Commands*	Contains commands for configuring and viewing the ATM interface.
Chapter 6, *Cross Connect Commands*	Contains commands for configuring and viewing cross connections.
Chapter 8, *IP Access Commands*	Contains commands for configuring and viewing the Internet Protocol (IP) port.
Chapter 7, *Equipment Commands*	Contains commands for configuring and viewing information concerning equipment in the network.
Chapter 9, *Performance Commands*	Contains commands for viewing network reports.
Chapter 10, *Fault Commands*	Contains commands for retrieving network fault information.

Section	Description
Chapter 11, *Log Commands*	Contains SYSLOG commands.
Chapter 12, *Security Commands*	Contains commands for configuring and viewing security information.
Chapter 13, *Synchronization Commands*	Contains commands for configuring and viewing information concerning the NE clock.
Chapter 14, *System Commands*	Contains commands for configuring and viewing general system functions.
Chapter 15, *Test Commands*	Contains commands for starting and stopping loopback tests.
Appendix A, *Error Codes*	Describes tools for monitoring the system and diagnosing problems.
Appendix B, *Command Cross Reference*	Contains an alphabetic list of TL1 commands
Appendix C, *Traps and MIBs*	Describes the SNMP traps, and the MIBs and objects supported.
Index	Lists key terms, concepts, and sections in alphabetical order.

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Product-Related Documents

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Document Number	Document Title
4200-A2-GN20	*GranDSLAM 4200 ATM Stackable DSLAM Installation Guide* Contains information for installing the GranDSLAM 4200 unit.
6390-A2-GN10	*Hotwire ReachDSL Modem, Model 6390 with Inline Phone Filter, Installation Instructions* Contains information for installing the Model 6390 modem.
8335-A2-GB20	*Hotwire ATM Line Cards, Models 8335, 8355, 8365, and 8385, User's Guide* Contains an appendix with information concerning the Hotwire 6390 ReachDSL Modem.
EMS-A2-GB21	*GrandVIEW EMS 3.0 User's Guide* Contains information for using the GrandVIEW EMS to manage the GranDSLAM 4200.

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Introduction to the Hotwire 4200 GranDSLAM

1

Overview

The GranDSLAM™ 4200 ATM Stackable DSLAM is a stackable DSLAM designed for installation in the Central Office (CO) environment or in a standalone configuration for small deployments. It is available with or without an integrated POTS splitter and is interoperable with the Hotwire 6390 ReachDSL modem.

The GranDSLAM 4200 provides 24 ports for connection to an ATM network. Multiple uplink options are available, including T1 and E1. A user interface is provided via a Transaction Language No. 1 (TL1) Command Line Interface (CLI) or the unit may be connected to a network management system such as the Paradyne GrandVIEW™ Element Management System (EMS).

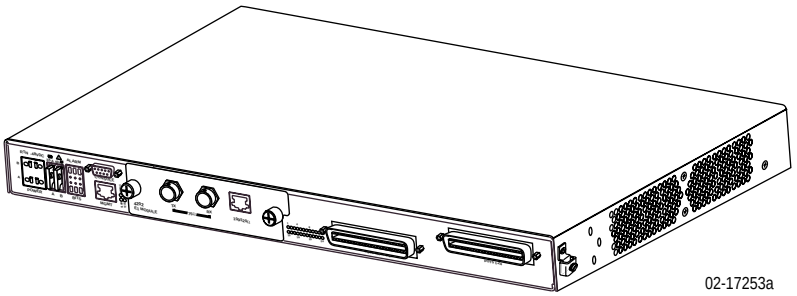

Figure 1-1. GranDSLAM 4200 ATM Stackable DSLAM

Figure 1-2 shows a typical application for the GranDSLAM 4200.

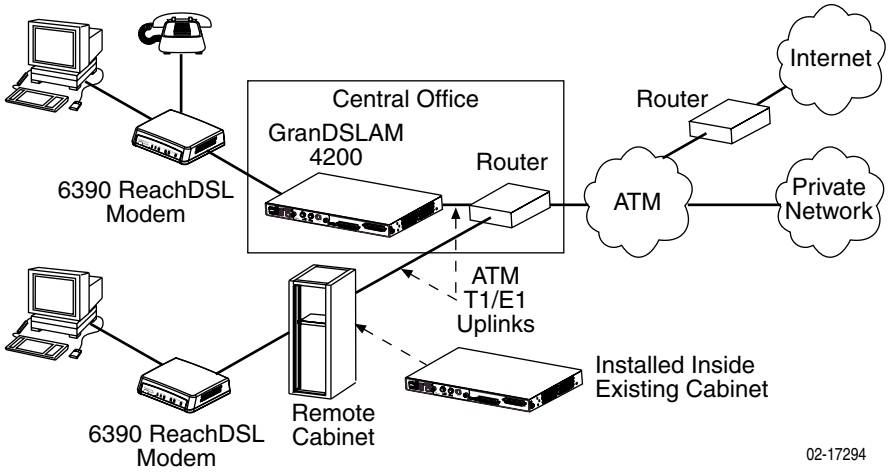

Figure 1-2. GranDSLAM 4200 Sample Application

Features

The GranDSLAM 4200 DSLAM has the following features:

- Compact size (height = 1U)
- Shelf-mountable (up to five units high) and rack-mountable
- Low price per port
- Up to 24 ports per unit
- Up to 120 ports per stack
- Integrated POTS splitter option
- Multiple uplink options:
  - Model 4201 T1 Uplink Module
  - Model 4202 E1 Uplink Module
- Customer self-installable with remote management
- Provides simultaneous POTS and data over standard, twisted pair copper lines
- Guaranteed rate of at least 256 Kbps to a distance of 18,000 feet (5.5 km)
- TL1 Command Line Interface (CLI)
- Support for Simple Network Management Protocol Version 1 (SNMPv1)

Using the Command Line Interface

2

Overview

The Command Line Interface (CLI) is accessible via either a directly connected terminal session or a Telnet connection. You can use the CLI to:

- Change the operational characteristics of the device by setting configuration values
- Display system status
- Perform diagnostics

The system supports multiple simultaneous CLI sessions.

TL1 Command Language

The GranDSLAM 4200 uses Transaction Language No. 1 (TL1) commands since it is a universal language and is familiar to many network users.

The TL1 command is in the following general format:

`COMMAND_CODE:[STAGING PARAMETERS]::<DATA_PARAMETERS>;`

where:

- The colon (:) is the data block delimiter.
- The semicolon (;) is the input command terminator.
- Square brackets ([ ]) designate that the enclosed value is optional.
- Angled brackets (< >) indicate that the enclosed words describe part of the command.

Command Code

The command code consists of a verb and one or more modifiers.

Table 2-1. TL1 Command Code Components

Command Code Component	Component Examples	Command Examples
Verb signifies action to be performed.	■ ACT (Activate) ■ ALW (Allow) ■ CANC (Cancel) ■ CPY (Copy) ■ DLT (Delete) ■ ED (Edit) ■ ENT (Enter) ■ INH (Inhibit) ■ OPR (operate/ activate) ■ INIT (Initialize) ■ RD (Read) ■ REPT (Report) ■ RLS (Release) ■ RTRV (Retrieve) ■ SET (Set) ■ STA (Start) ■ STP (Stop)	■ ACT-USER (Activate User) ■ ALW-MSG-ALL (Allow Message All) ■ CANC-USER (Cancel User) ■ CPY-FILE (Copy File) ■ DLT-VCL (Delete VCL) ■ ED-ATMPORT (Edit ATM Port) ■ ENT-IPPORT (Enter IP Port) ■ INH-MSG-ALL (Inhibit Message All) ■ OPR-LPBK-VCL (Operate Loopback VCL) ■ INIT-LOG (Initialize Log) ■ RD-SYNCN (Read Synchronization) ■ REPT-ALM-EQPT (Report Alarm Equipment) ■ RLS-LPBK-T1 (Release Loopback T1) ■ RTRV-COND-T1 (Retrieve Condition T1) ■ SET-DAT (Set Date) ■ STA-LAMPTST (Start Lamptest) ■ STP-LAMPTST (Stop Lamptest)
First modifier designates the unit the verb is acting upon, or defines the particular view to which the command is directed.	USER	ACT-USER (Activate User)
Second modifier defines the unit or function to which the command is directed.	SECU	ACT-USER-SECU (Activate User Security)

Parameters

Parameters are values which clarify the function of a command. Parameter syntax must be followed exactly to avoid system error responses. There are two types of parameters:

- **Staging parameters** – Designate where the verb of the command conducts its operation (address). There are three unique addressing parameters:
  - — Target IDentification (TID) – Identifies the Network Element (NE) to which the command is directed. Each NE in the system should have its own TID code.
  - — Access IDentification (AID) – Gives the location of the network entity (such as specific facilities and equipment) to which the command is directed.

    When accessing multiple records, grouping and ranging of parameters may be allowed. An example if grouping is in the command **`RTRV-EQPT::LT-1-1-4&LT-1-1-5&LT-1-1-6`**; where units **`-4, -5,`** and **`-6`** are requested. Note that the group must be specified for each item entered. An example of ranging is in the command **`RTRV-EQPT::LT-1-1-4&&-6`**; where **`-4&&-6`** requests units 4 through 6. The ampersand (&) separates descriptive records, groups, and members within an AID.
  - — Correlation TAG (CTAG) – Correlates the response message to the input command. A response to a command echoes the appropriate CTAG. This field is optional and can be any valid value or blank. The CLI automatically fills in **`100`** (see *Command Entry Features* on page 2-4).
- **Data parameters** – Provide specific data that may either be required or optional. For example, in the command SET-DAT, the date and time are data parameters (see **SET-DAT** in Chapter 14, *System Commands* for more information).

Output Messages

Output messages are either the result of an input command or an event that occurred in an NE, or are autonomous. The response message can be either normal or an error report (see Appendix A, *Error Codes*). Those messages that are not a response to an input command are classified as autonomous.

Command Entry Features

The GranDSLAM 4200 uses Transaction Language No. 1 (TL1) language for CLI commands and messages. These commands and messages are used to configure and maintain the system.

TL1 offers the following features to help you with command entry:

- **Automatic command completion.** You need to type only enough of a command to make it unique, then type a question mark (?) and the CLI replies with the correct syntax for the command.

  For example, if you enter:

  RTRV-H

  the CLI expands it to:

  RTRV-HDR:[TID]::[CTAG];

- **Automatic completion of optional fields.** Pressing the Tab key while entering a command causes the CLI to fill in the optional fields.

  For example, enter:

  RTRV-HDR

  Press the Tab key, the CLI fills in the TID:

  RTRV-HDR:TL1-Agent

  Press the Tab key twice again, the CLI fills in the delimiters:

  RTRV-HDR:TL1-Agent::

  Press the Tab key again, the CLI fills in the CTAG:

  RTRV-HDR:TL1-Agent::100

  Keep pressing the Tab key to fill in the rest of the command delimiters:

  RTRV-HDR:TL1-Agent::100::;

- **Command listing.** If you begin typing a command, then press the Tab key, the CLI cycles through all the commands that contain the characters you have just typed.

  For example, enter:

  RTRV-PROFILE

  Press the Tab key, the CLI displays:

  RTRV-PROFILE-ADSLALM

  Press the Tab key again, the CLI displays:

  RTRV-PROFILE-ADSLDNALM

  Press the Tab key again, the CLI displays:

  RTRV-PROFILE-ADSLDN

- **Command query.** You can obtain help with CLI commands by typing a **?** (question mark). A question mark alone lists all commands.

  For example, if you enter:

  RTRV ?

  the CLI lists all the possible RTRV commands.

- **Command history.** Pressing the Up Arrow key while entering a command returns the CLI to the previous command entry.

- **Retrieve a list of all commands.** Use the RTRV-META command to retrieve a list of all commands.

User Access Privilege Levels

CLI users have one of three user access privilege levels:

- **RTRV** – The user may use retrieve (RTRV) and report (REPT) commands to view system information.
- **PROV** – The user has access to RTRV, REPT and configuration (provisioning) commands.
- **SUPER** – The user has access to all commands (supervisor level).

The GranDSLAM 4200 is shipped with a default user of SUPERUSER and password of ASN#1500. This provides supervisor-level access. It is recommended that you change this default to define the user password(s) and user access privilege level(s) needed for your system for security purposes (see Chapter 12, *Security Commands* for more information).

Logging In

The ACT-USER command logs a user in and begins a user session. See **ACT-USER** in Chapter 14, *System Commands* for more information.

GranDSLAM 4200 Turn-up Procedure

You can turn up your GranDSLAM 4200 through the Ethernet connection via a PC or terminal connected to the unit's CONSOLE port. Then using a series of TL1 commands or an NMS system such as Paradyne's GrandVIEW Element Management System (EMS), you configure the unit for operation.

The turn-up procedure for the GranDSLAM 4200 system differs, depending on the type of management used:

- Inband Management – Operates over the ATM interface. This is the default for the GranDSLAM 4200.
- Out-of-Band Management – Operates over the Ethernet interface.

The turn-up procedure for both management types also differs, depending on whether you are in Manual mode (no DHCP server), or in DHCP (BOOTP) mode using a DHCP server.

- Manual Mode – If a DHCP server is not being used, you must manually assign an IP address to your GranDSLAM 4200.
- DHCP Mode – If you are using a DHCP server, you do not need to manually assign an IP address since this is done automatically.

Turn-up Procedure for Inband Management

▶ Procedure

To turn up the GranDSLAM 4200 using inband management:

1. *Manual Mode:* At the unit, configure the IP address, net mask, and next-hop router.

   DHCP Mode: Set the ATM1 physical address using the ED-IPPORT command (see **ED-IPPORT** in Chapter 8, *IP Access Commands*), or accept the default, which is based on the MAC address assigned to the unit.

   Later, when determining what IP address has been assigned via DHCP, look for the MAC address in the DHCP server table. The assigned address is normally the address of the Ethernet port with the ATM physical address appended (0101 for ATM-1 or 0202 for ATM-2). The RTRV-IPPORT command retrieves IP port configuration information (see **RTRV-IPPORT** in Chapter 8, *IP Access Commands*).

2. At the NOC, build a PVC through the network to the unit using VPI/VCI 0,32 and 1483 routed encapsulation. Then, configure routers, etc., as necessary to route data from the NOC to the GranDSLAM 4200.

3. Enable security for your GranDSLAM 4200 unit. Using the TL1 command ENT-USER-SECU, change the default login and password. Use the EMS to configure SNMP community strings, the SYSLOG server, and trap managers.

4. Change the time, if necessary. The Simple Network Time Protocol (SNTP), which maintains the unit's clock, defaults to enabled for multicast. However, you can change the time offset from Coordinated Universal Time (UTC) using the TZOFFSET parameter of the SET-NE-ALL TL1 command. See **SET-NE-ALL** in Chapter 14, *System Commands* for more information.

Turn-up Procedure for Out-of-Band Management

In out-of-band management, you are managing the unit using the Ethernet interface. This port is configured through the Console port.

▶ Procedure

To turn up the GranDSLAM 4200 using the Ethernet interface:

1. At the unit, enable the Ethernet port.

2. *Manual Mode:* Assign an IP address, netmask, and next-hop router.

   DHCP Mode: Configure the DHCP server out of the Ethernet port.

3. Configure routers, etc., as necessary to route data from the NOC to the GranDSLAM 4200.

4. Reset the DHCP server and the SNTP since they default to managing from the ATM interface (inband management).

5. Enable security for your GranDSLAM 4200 unit. Using the TL1 command ENT-USER-SECU, change the default login and password. Use the EMS to configure SNMP community strings, the SYSLOG server, and trap managers.
6. Change the time, if necessary. The Simple Network Time Protocol (SNTP), which maintains the unit's clock, defaults to enabled for multicast. However, you can change the time offset from Coordinated Universal Time (UTC) using the TZOFFSET parameter of the SET-NE-ALL TL1 command. See **SET-NE-ALL** in Chapter 14, *System Commands* for more information.

Configuring the Unit for Operation

Once the unit is connected to the network, the following turn-up procedures should be performed:

- Change the login and password using the ED-USER-SECU TL1 command from the defaults SUPERUSER, ASN#1500.
- Change the SNMP community strings using the EMS.

Optionally, you may also choose to do the following using the EMS:

- Configure the syslog server at the NOC.
- Configure the trap managers.

Additional Configuration Commands

Additional configuration is necessary if you do not choose to accept the defaults that have been automatically assigned to your GranDSLAM 4200.

Additional TL1 commands that you may need are listed in Table 2-2, GranDSLAM 4200 Configuration Commands. The ADSL and ATM profiles can also be configured using the EMS (see the *GrandVIEW EMS 3.0 User's Guide*).

Table 2-2. GranDSLAM 4200 Configuration Commands

To . . .	Enter this command . . .
Configure data associated with the T1/DS1 facility	**ENT-T1:[tid]:NTT1-circuit:[ctag]:::ds1_nblk:[pst];**
Manually configure an Internet Protocol (IP) address (Manual mode)	**ENT-IPPORT:[tid]:ATM-1:[ctag]::MANUAL:ipport_nblk:[pst];**
Set miscellaneous configuration parameters, in particular the use of SNTP, (defaults to enabled)	**SET-NE-ALL:[tid]:[aid_com]:[ctag]:::ne_nblk;**
Retrieve a list of equipped units	**RTRV-EQPT:[tid]:ALL;**

Table 2-2. GranDSLAM 4200 Configuration Commands

To . . .	Enter this command . . .
Add to the list of equipped units in the network	**ENT-EQPT:[tid]:aid_eqpt:[ctag]::eqpt_type:[eqpt_nblk]:[pst];**
View a list of existing ATM Access profiles	**RTRV-PROFILE-ATMACC:[tid]:atmacc_profile_id:[ctag]::,[profile_scope];**
Apply a profile to an ADSL port	**ED-ADSL:[tid]:aid_adsl:[ctag]:::[adsl_nblk]:[pst];**
Create an ATM traffic descriptor profile	**ENT-PROFILE-TRAFDSC:[tid]:trafdscprofile_id:[ctag]::profile_name,,trafdsc_type:[trafdsc_nblk];**
Create an additional ADSL line profile different from the default profile	**ENT-PROFILE-ADSL:[tid]:[adsl_profile_id]:[ctag]::profile_name,,[latency];**
Configure downstream transmission parameters for any additional ADSL line profiles created	**ED-PROFILE-ADSLDN:[tid]:adsl_profile_id:[ctag]:::[adslprof_nblk];**
Configure upstream transmission parameters for any additional ADSL line profiles created	**ED-PROFILE-ADSLUP:[tid]:adsl_profile_id:[ctag]:::[adslprof_nblk];**
Activate the ADSL line profiles created	**ACT-PROFILE-ADSL:[tid]:adsl_profile_id:[ctag][:]**
Create a Virtual Channel Link (VCL) endpoint for the GranDSLAM 4200	**ENT-VCL:[tid]:aid_vci:[ctag]::rcv_trafdsc,xmt_trafdsc;**
Connect VCL endpoints	**ENT-CRS-VC:[tid]:nt_vci,lt_vci:[ctag]::::[pst];**

ADSL Facility Commands

3

Overview

This chapter contains the following ADSL Facility commands:

ACT-PROFILE-ADSL

The ACT-PROFILE-ADSL command activates newly created ADSL profiles. See **ENT-PROFILE-ADSL** on page 3-24 for information on how to create a new ADSL profile.

Table 3-1. ACT-PROFILE-ADSL Command Parameters

ACT-PROFILE-ADSL:[tid]:adsl_profile_id:[ctag][:];	
RESTRICTIONS: All parameters in this command are position-defined. After a profile is activated, its parameters cannot be edited.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
adsl_profile_id	Numeric identifier of a profile (1–30). Grouping and ranging are allowed.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ACT-PROFILE-ADSL:[tid]:adsl_profile_id:[ctag][:] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* ACT-PROFILE-ADSL:[tid]:adsl_profile_id:[ctag][:] */
   errcde
;
```

Table 3-2. ACT-PROFILE-ADSL Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Activate profile 6.

```
ACT-PROFILE-ADSL:TAMPA:6:42;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* ACT-PROFILE-ADSL:TAMPA:6:42 */
;
```

Related Commands

DLT-PROFILE-ADSL on page 3-6

ED-PROFILE-ADSLDN on page 3-14

ED-PROFILE-ADSLUP on page 3-19

ENT-PROFILE-ADSL on page 3-24

RTRV-PROFILE-ADSL on page 3-40

ACT-PROFILE-ADSLALM

The ACT-PROFILE-ADSLALM command activates newly created ADSL alarm profiles. See **ENT-PROFILE-ADSLALM** on page 3-26 for information on how to create a new ADSL alarm profile.

Table 3-3. ACT-PROFILE-ADSLALM Command Parameters

ACT-PROFILE-ADSLALM:[tid]:adsl_profile_id:[ctag][:];	
RESTRICTIONS: All parameters in this command are position-defined. After a profile is activated, its parameters cannot be edited.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
adsl_profile_id	Numeric identifier of a profile (1–30). Grouping and ranging are allowed.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ACT-PROFILE-ADSLALM:[tid]:adsl_profile_id:[ctag][:] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* ACT-PROFILE-ADSLALM:[tid]:adsl_profile_id:[ctag][:] */
   errcde
;
```

Table 3-4. ACT-PROFILE-ADSLALM Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Activate profile 6.

```
ACT-PROFILE-ADSLALM:TAMPA:6:42;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* ACT-PROFILE-ADSLALM:TAMPA:6:42 */
;
```

Related Commands

DLT-PROFILE-ADSLALM on page 3-8

ED-PROFILE-ADSLDNALM on page 3-16

ED-PROFILE-ADSLUPALM on page 3-21

ENT-PROFILE-ADSLALM on page 3-26

RTRV-PROFILE-ADSLALM on page 3-42

DLT-PROFILE-ADSL

The DLT-PROFILE-ADSL command deletes selected ADSL modem configuration profiles that are not in use.

Table 3-5. DLT-PROFILE-ADSL Command Parameters

DLT-PROFILE-ADSL:[tid]:adsl_profile_id:[ctag][:];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
adsl_profile_id	Numeric identifier of a profile (2–30). Grouping and ranging are allowed. Profile 1 is a predefined profile and cannot be deleted.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* DLT-PROFILE-ADSL:[tid]:adsl_profile_id:[ctag][:] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* DLT-PROFILE-ADSL:[tid]:adsl_profile_id:[ctag][:] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 3-6. DLT-PROFILE-ADSL Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Delete profile 6.

```
DLT-PROFILE-ADSL:TAMPA:6:42;

TAMPA 02-01-24 12:30:43
M  42 COMPLD
   /* DLT-PROFILE-ADSL:TAMPA:6:42 */
;
```

Related Commands

ACT-PROFILE-ADSL on page 3-2

ENT-PROFILE-ADSL on page 3-24

RTRV-PROFILE-ADSL on page 3-40

DLT-PROFILE-ADSLALM

The DLT-PROFILE-ADSLALM command deletes selected ADSL alarm configuration profiles that are not in use.

Table 3-7. DLT-PROFILE-ADSLALM Command Parameters

DLT-PROFILE-ADSLALM:[tid]:adsl_profile_id:[ctag][:];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
adsl_profile_id	Numeric identifier of a profile (2–30). Grouping and ranging are allowed. Profile 1 is a predefined profile and cannot be deleted.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* DLT-PROFILE-ADSLALM:[tid]:adsl_profile_id:[ctag][:] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* DLT-PROFILE-ADSLALM:[tid]:adsl_profile_id:[ctag][:] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 3-8. DLT-PROFILE-ADSLALM Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Delete profile 6.

```
DLT-PROFILE-ADSLALM:TAMPA:6:42;

TAMPA 02-01-24 12:30:43
M  42 COMPLD
   /* DLT-PROFILE-ADSLALM:TAMPA:6:42 */
;
```

Related Commands

ACT-PROFILE-ADSLALM on page 3-4

ENT-PROFILE-ADSLALM on page 3-26

RTRV-PROFILE-ADSLALM on page 3-42

ED-ADSL

The ED-ADSL command edits configuration data associated with an ADSL facility on an LT and applies it to the port.

Table 3-9. ED-ADSL Command Parameters (1 of 2)

ED-ADSL:[tid]:aid_adsl:[ctag]:::[adsl_nblk]:[pst];	
RESTRICTIONS: All parameters in this command are position-defined. ATM access profiles cannot be changed while any VPLs or VCLs exist.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_adsl	Access identifier for ADSL line. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: ADSL-rack-shelf-slot-circuit rack: Rack number (1) shelf: Shelf number (1) slot: LT slot number (1) circuit: ADSL circuit on the LT (1–24)
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
adsl_nblk	Named parameter block for ADSL parameters. The block consists of the following parameters, in any order separated by commas each followed by an equal sign and a valid value. PORTID: Port/circuit identifier (32 characters maximum). Indicates user to whom port is assigned. The default is null. The following values are reserved and cannot be used: – AVAILABLE (port is not assigned) – FAULTY (port is faulty and cannot be assigned) QOSCLASSF: Quality of Service for the ADSL Fast channel. The supported option is UBR (Unspecified bit rate). UBR is the default. EWL: Equivalent Working Length. Specifies the length of the DSL line. This value is used to limit transmit rates and maximum power settings according to local spectrum management guidelines. EWL is usually specified by the carrier. The default is 10 kft. The values supported are: – 8.5 to 14.5 kft in .5 kft increments – >14.5 kft POTSLVL: POTS Level. Specifies the voltage used to detect the presence of Plain Old Telephone Service (POTS) on the DSL line. The default is 3 volts. The values supported are: – 0 to 74 volts, in 1-volt increments (setting to 74 volts disables POTS detection) – Disable (disables POTS detection)

Table 3-9. ED-ADSL Command Parameters (2 of 2)

ED-ADSL:[tid]:aid_adsl:[ctag]:::[adsl_nblk]:[pst];	
adsl_nblk *(continued)*	MXTXPWRDN: Specifies the maximum transmission power settings for the ATU-C. The maximum transmit power range may be limited according to local guidelines when spectrum management is enabled. The values (configurable in 1 dB increments) supported are: – +12 to –14dB (default is +12 dB), for all models when spectrum management is disabled, for Canada models when EWL is 10 kft or less, and for U.S. models with spectrum management enabled. – +11 to –14dB (default is +11 dB) For Canada models with spectrum management enabled when EWL is greater than 10 kft. MXTXPWRUP: Specifies the maximum transmission power settings for the ATU-R. The maximum transmit power range may be limited according to local guidelines when spectrum management is enabled. The values (configurable in 1 dB increments) supported are: – +12 to –14dB (default is +12 dB), for all models when spectrum management is disabled, for Canada models when EWL is ≤10 kft, and for U.S. models with spectrum management enabled. – +11 to –14dB (default is +11 dB) For Canada models with spectrum management enabled when EWL is >10 kft. For the following parameters (ADSLPROF and ADSLPROFNM), both cannot be specified. ADSLPROF: The ADSL alarm profile index (1–30, default is 1) ADSLPROFNM: The ADSL alarm profile name (default is NTDEFVAL) The following parameters (ATMACCPROFF and ATMACCPROFFNM), cannot be specified while any VPLs or VCLs exist. ATMACCPROFF: ATM Access Profile Index for ADSL Fast channel (2) ATMACCPROFFNM: ATM Access Profile name for ADSL Fast channel If not specified, the values of these parameters remain unchanged.
[pst]	Desired primary state. Valid values are: IS: In-Service OOS: Out-Of-Service (OOS-MA is implied) If not specified, the value of this parameter remains unchanged.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ED-ADSL:[tid]:aid_adsl:[ctag]:::[adsl_nblk]:[pst] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* ED-ADSL:[tid]:aid_adsl:[ctag]:::[adsl_nblk]:[pst] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 3-10. ED-ADSL Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Edit rack 1, shelf 1, slot 1, circuit 20 to have an ADSL line profile of 4 and be in service.

```
ED-ADSL:TAMPA:ADSL-1-1-1-20:42:::ADSLPROF=4:PST=IS;

   TAMPA 01-10-20 11:32:43
M  42 COMPLD
   /* ED-ADSL:TAMPA:ADSL-1-1-1-20:42:::ADSLPROF=4:PST=IS  */
;
```

Related Command

RTRV-ADSL on page 3-32

ED-PROFILE-ADSLDN

The ED-PROFILE-ADSLDN command enables you to edit ADSL line configuration parameters for the downstream direction (from ATU-C to ATU-R) in an ADSL Profile. See **ENT-PROFILE-ADSL** on page 3-24 for information on how to create a new ADSL profile.

Table 3-11. ED-PROFILE-ADSLDN Command Parameters

ED-PROFILE-ADSLDN:[tid]:adsl_profile_id:[ctag]:::[adslprof_nblk];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
adsl_profile_id	Numeric identifier of a profile (1–30).
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
[adslprof_nblk]	ADSL parameter block containing one or more of the following named parameters (separated by commas): TNMR: Target noise margin (3–14 dB). Default is 4 dB. MAXFBR: Maximum fast-channel bit rate in kilobits per second (32–2176). The default is 2176. Range and default vary per model. MINFBR: Minimum fast-channel bit rate in kilobits per second (32). The default is 32. Range and default vary per model. RAMODE: Rate adaptive mode. Valid value is AT_RUN (Automatically selected at run time). PFBR: Planned fast channel bit rate in kilobits per second (32–2176). The default is 32. If not specified, the values of these parameters remain unchanged.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /*
ED-PROFILE-ADSLDN:[tid]:adsl_profile_id:[ctag]:::[adslprof_nblk] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /*
ED-PROFILE-ADSLDN:[tid]:adsl_profile_id:[ctag]:::[adslprof_n
blk] */
   errcde
;
```

Table 3-12. ED-PROFILE-ADSLDN Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Edit profile 6 to have a Rate Adaptive Mode automatically selected at run time.

```
ED-PROFILE-ADSLDN:TAMPA:6:42:::RAMODE=AT_RUN;

   TAMPA 02-07-24 12:30:43
M  42 COMPLD
   /* ED-PROFILE-ADSLDN:TAMPA:6:42:::RAMODE=AT_RUN; */

;
```

Related Commands

ACT-PROFILE-ADSL on page 3-2

DLT-PROFILE-ADSL on page 3-6

ED-PROFILE-ADSLUP on page 3-19

ENT-PROFILE-ADSL on page 3-24

RTRV-PROFILE-ADSL on page 3-40

RTRV-PROFILE-ADSLDN on page 3-44

RTRV-PROFILE-ADSLUP on page 3-50

ED-PROFILE-ADSLDNALM

The ED-PROFILE-ADSLDNALM command enables you to edit ADSL alarm line configuration parameters for the downstream direction (from ATU-C to ATU-R) in an ADSL Alarm Profile. See **ENT-PROFILE-ADSLALM** on page 3-26 for information on how to create a new ADSL alarm profile.

Table 3-13. ED-PROFILE-ADSLDNALM Command Parameters

ED-PROFILE-ADSLDNALM:[tid]:adsl_profile_id:[ctag]:::[adslprof_nblk];	
RESTRICTIONS: All parameters in this command are position-defined. After a profile is activated, its parameters cannot be edited.	
[tid]	Identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
adsl_profile_id	Numeric identifier of a profile (1–30).
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
[adslprof_nblk]	ADSL parameter block containing one or more of the following named parameters (separated by commas): LOFS-L: Loss Of Frame Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of LOFS events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. LPRS-L: Loss Of Power Seconds (line). SNMP trap and TL1 autonomous messages are sent if the number of LPRS events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. (This statistic is not incremented when a Hotwire Model 6390 ReachDSL Modem is attached to the line.) ES-L: Errored Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of ES events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. SES-L: Severely Errored Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of SES events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. UAS-L: Unavailable Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of UAS events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. INCRATE-F: Increasing Rate (fast channel). SNMP rate change trap and TL1 autonomous message are sent if the current rate is ≥ the previous rate plus this threshold (0-2176 kbps in 32 kbps increments, where 0 disables the messages). The default is 0. DECRATE-F: Decreasing Rate (fast channel). SNMP rate change trap and TL1 autonomous message are sent if the current rate is ≤ the previous rate minus this threshold (0-2176 kbps in 32 kbps increments, where 0 disables the messages). The default is 0. If not specified, the values of these parameters remain unchanged.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ED-PROFILE-ADSLDNALM:[tid]:adsl_profile_id:[ctag]:::
[adslprof_nblk] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* ED-PROFILE-ADSLDNALM:[tid]:adsl_profile_id:[ctag]:::
[adslprof_nblk] */
   errcde
;
```

Table 3-14. ED-PROFILE-ADSLDNALM Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Edit profile 6 to have an Errored Seconds threshold of 2.

```
ED-PROFILE-ADSLDNALM:TAMPA:6:42:::ES-L=2;
```

```
   TAMPA 02-07-24 12:30:43
M  42 COMPLD
   /* ED-PROFILE-ADSLDNALM:TAMPA:6:42:::ES-L=2; */

;
```

Related Commands

ENT-PROFILE-ADSLALM on page 3-26

RTRV-PROFILE-ADSLDNALM on page 3-47

ED-PROFILE-ADSLUP

The ED-PROFILE-ADSLUP command enables you to edit ADSL line configuration parameters for the upstream direction (from ATU-R to ATU-C) in an ADSL Profile. See **ENT-PROFILE-ADSL** on page 3-24 for information on how to create a new ADSL profile.

Table 3-15. ED-PROFILE-ADSLUP Command Parameters

ED-PROFILE-ADSLUP:[tid]:adsl_profile_id:[ctag]:::[adslprof_nblk];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. TID is optional and has an default value of null. The NE's SID code is the only other valid value.
adsl_profile_id	Numeric identifier of a profile (1–30).
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
[adslprof_nblk]	ADSL parameter block containing one or more of the following named parameters (separated by commas): PFBR: Planned Fast Channel Bit Rate in kbps (32–2176). MAXFBR: Maximum fast-channel bit rate in kilobits per second (32–2176). The default is 2176. Range and default vary per model. MINFBR: Minimum fast-channel bit rate in kilobits per second (32). The default is 32. Range and default vary per model. TNMR: Target noise margin (3–14 dB). Default is 4 dB. If not specified, the values of these parameters remain unchanged.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /*
ED-PROFILE-ADSLUP:[tid]:adsl_profile_id:[ctag]:::[adslprof_nblk] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /*
ED-PROFILE-ADSLUP:[tid]:adsl_profile_id:[ctag]:::[adslprof_n
blk] */
   errcde
;
```

Table 3-16. ED-PROFILE-ADSLUP Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Edit profile 6 to have a Target Noise Margin of 10 dB.

```
ED-PROFILE-ADSLUP:TAMPA:6:42:::TNMR=10;

   TAMPA 02-07-24 12:30:43
M  42 COMPLD
   /* ED-PROFILE-ADSLUP:TAMPA:6:42:::TNMR=10; */

;
```

Related Commands

ACT-PROFILE-ADSL on page 3-2

DLT-PROFILE-ADSL on page 3-6

ED-PROFILE-ADSLDN on page 3-14

ENT-PROFILE-ADSL on page 3-24

RTRV-PROFILE-ADSL on page 3-40

RTRV-PROFILE-ADSLDN on page 3-44

RTRV-PROFILE-ADSLUP on page 3-50

ED-PROFILE-ADSLUPALM

The ED-PROFILE-ADSLUPALM command enables you to edit ADSL alarm line configuration parameters for the upstream direction (from ATU-R to ATU-C) in an ADSL Alarm Profile. See **ENT-PROFILE-ADSLALM** on page 3-26 for information on how to create a new ADSL alarm profile.

Table 3-17. ED-PROFILE-ADSLUPALM Command Parameters (1 of 2)

ED-PROFILE-ADSLUPALM:[tid]:adsl_profile_id:[ctag]:::[adslprof_nblk];	
RESTRICTIONS: All parameters in this command are position-defined. After a profile is activated, its parameters cannot be edited.	
[tid]	Identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
adsl_profile_id	Numeric identifier of a profile (1–30).
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
[adslprof_nblk]	ADSL parameter block containing one or more of the following named parameters (separated by commas): LOFS-L: Loss Of Frame Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of LOFS events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. LOSS-L: Loss Of Signal Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of LOSS events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. LOLS-L: Loss Of Link Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of LOLS events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. ES-L: Errored Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of ES events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. SES-L: Severely Errored Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of SES events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. UAS-L: Unavailable Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of UAS events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. INCRATE-F: Increasing Rate (fast channel). SNMP rate change trap and TL1 autonomous message are sent if the current rate is ≥ the previous rate plus this threshold (0-2176 kbps in 32 kbps increments, where 0 disables the messages). The default is 0.

Table 3-17. ED-PROFILE-ADSLUPALM Command Parameters (2 of 2)

ED-PROFILE-ADSLUPALM:[tid]:adsl_profile_id:[ctag]:::[adslprof_nblk];	
[adslprof_nblk] *(continued)*	DECRATE-F: Decreasing Rate (fast channel). SNMP rate change trap and TL1 autonomous message are sent if the current rate is ≤ the previous rate minus this threshold (0-2176 kbps in 32 kbps increments, where 0 disables the messages). The default is 0. INITFAIL: Initialization Failure. Enables or disables InitFailureTrap messages specified in RFC 2662. – Y: Enable Initialization Failure Trap messages only. – N: Disable Initialization Failure Trap messages only (Default). If not specified, the values of these parameters remain unchanged.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ED-PROFILE-ADSLUPALM:[tid]:adsl_profile_id:[ctag]:::
[adslprof_nblk] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* ED-PROFILE-ADSLUPALM:[tid]:adsl_profile_id:[ctag]:::
[adslprof_nblk] */
   errcde
;
```

Table 3-18. ED-PROFILE-ADSLUPALM Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Edit profile 6 to have an Severely Errored Seconds threshold of 8.

```
ED-PROFILE-ADSLUPALM:TAMPA:6:42:::SES-L=8;

   TAMPA 02-07-24 12:30:43
M  42 COMPLD
   /* ED-PROFILE-ADSLUPALM:TAMPA:6:42:::SES-L=8; */

;
```

Related Commands

ACT-PROFILE-ADSLALM on page 3-4

DLT-PROFILE-ADSLALM on page 3-8

ENT-PROFILE-ADSLALM on page 3-26

RTRV-PROFILE-ADSLUPALM on page 3-53

ENT-PROFILE-ADSL

The ENT-PROFILE-ADSL command allocates a new ADSL line configuration profile. A new ADSL profile is created using the following steps:

1. Allocate a new profile with **ENT-PROFILE-ADSL**.
2. Configure downstream transmission parameters with **ED-PROFILE-ADSLDN**.
3. Configure upstream transmission parameters with **ED-PROFILE-ADSLUP**.
4. Activate the profile with **ACT-PROFILE-ADSL**.
5. Apply the profile to a port with **ED-ADSL**.

Table 3-19. ENT-PROFILE-ADSL Command Parameters

ENT-PROFILE-ADSL:[tid]:[adsl_profile_id]:[ctag]::profile_name,,[latency];	
RESTRICTIONS: Valid only for profiles with LOCAL scope. All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
adsl_profile_id	ADSL profile index (1–30). The profile must not already be in use. Profile 1 (a predefined profile shipped with the system) is the default and is always active. If no profile is entered, the next available profile index will be assigned. If an index is entered, it must be the next available index.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
profile_name	Name (1–32 characters) that uniquely identifies the profile
latency	Latency of the ADSL line. Only single latency is supported upstream and downstream. The valid value is FAST (only ADSL FAST supported).

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ENT-PROFILE-ADSL:[tid]:adsl_profile_id:[ctag]::
profile_name */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* ENT-PROFILE-ADSL:[tid]:adsl_profile_id:[ctag]::
profile_name */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 3-20. ENT-PROFILE-ADSL Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Configure profile 6 with a profile name of TAMPA201.

```
ENT-PROFILE-ADSL:TAMPA:6:42::TAMPA201;
```

```
  TAMPA 02-07-24 08:23:13
M  42 COMPLD
   /* ENT-PROFILE-ADSL:TAMPA:6:42:TAMPA201 */
;
```

Related Commands

ACT-PROFILE-ADSL on page 3-2

DLT-PROFILE-ADSL on page 3-6

ED-PROFILE-ADSLDN on page 3-14

ED-PROFILE-ADSLUP on page 3-19

RTRV-PROFILE-ADSL on page 3-40

ENT-PROFILE-ADSLALM

The ENT-PROFILE-ADSLALM command allocates a new ADSL alarm configuration profile. A new ADSL alarm profile is created using the following steps:

1. Allocate a new profile with **ENT-PROFILE-ADSLALM**.
2. Configure downstream transmission parameters with **ED-PROFILE-ADSLDNALM**.
3. Configure upstream transmission parameters with **ED-PROFILE-ADSLUPALM**.
4. Activate the profile with **ACT-PROFILE-ADSLALM**.

Table 3-21. ENT-PROFILE-ADSLALM Command Parameters

ENT-PROFILE-ADSLALM:[tid]:[adsl_profile_id]:[ctag]::profile_name;	
RESTRICTIONS: Valid only for profiles with LOCAL scope. All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
adsl_profile_id	ADSL profile index (1–30). The profile must not already be in use. Profile 1 (a predefined profile shipped with the system) is the default and is always active. If no adsl_profile-id is specified, the next available index will be assigned.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
profile_name	Name (1–32 characters) that uniquely identifies the profile

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ENT-PROFILE-ADSLALM:[tid]:[adsl_profile_id]:[ctag]::
profile_name */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* ENT-PROFILE-ADSLALM:[tid]:[adsl_profile_id]:[ctag]::
profile_name */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 3-22. ENT-PROFILE-ADSLALM Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Configure profile 6 with a profile name of TAMPA201.

```
ENT-PROFILE-ADSLALM:TAMPA:6:42::TAMPA201;

  TAMPA 02-07-24 08:23:13
M  42 COMPLD
   /* ENT-PROFILE-ADSLALM:TAMPA:6:42:TAMPA201 */
;
```

Related Commands

ACT-PROFILE-ADSLALM on page 3-4

ED-PROFILE-ADSLDNALM on page 3-16

ED-PROFILE-ADSLUPALM on page 3-21

RTRV-PROFILE-ADSLALM on page 3-42

REPT ALM ADSL

The REPT ALM ADSL message reports current alarms associated with an ADSL facility on an LT.

Table 3-23. REPT ALM ADSL Message Parameters (1 of 2)

almcode atag REPT ALM ADSL aid_adsl:ntfcde,cond_adsl, srveff,[ocrdat],[ocrtm],[locn], [dirn];[cond_descr];	
almcde	Alarm code. Identifies the severity of the alarm. Values are: *C: Critical alarm **: Major alarm *^: Minor alarm A^: Automatic message (typically reports a cleared alarm)
atag	Automatic tag indicating the numerical sequence of messages reported.
aid_adsl	Access identifier for the ADSL line(s). Enter in the following format, replacing lower-case parameters with the values given: ADSL-rack-shelf-slot-circuit – rack: Rack Number (1) – shelf: Shelf Number (1) – slot: LT Slot Number (1) – circuit: ADSL circuit on the LT (1–24) Grouping and ranging are allowed.
ntfncde	Notification code. Valid values are: CR: Critical alarm MJ: Major alarm MN: Minor alarm CL: Cleared alarm
cond_adsl	ADSL condition. Valid values are: FACTERM Modem could not initialize (Near End only) LCD-F: Loss of Cell Delineation (fast) (Near End only) LOF: Loss of Frame LOL: Loss of Link LORATE: Line rate is below planned rate (Loss of Signal Quality) LOS: Loss of Signal (Near End only) LPR: Loss of Power (Far End only)
[serveff]	Service effect. Valid values are: SA: Service affecting NSA: Not service affecting
ocrdat	Date of occurrence in the format mm-dd.
ocrtm	Time of occurrence in the format hh-mm.

Table 3-23. REPT ALM ADSL Message Parameters (2 of 2)

almcode atag REPT ALM ADSL aid_adsl:ntfcde,cond_adsl, srveff,[ocrdat],[ocrtm],[locn], [dirn];[cond_descr];	
[locn]	Location of the condition. Valid values are: NEND: Near end FEND: Far end If no value is specified, ALL is assumed.
[dirn]	Signal direction. Valid value is RCV (Receive).
[cond_descr]	Description of alarm condition (40 characters maximum).

REPT EVT ADSL

The REPT EVT ADSL message reports current events associated with an ADSL facility on an LT.

Table 3-24. REPT EVT ADSL Message Parameters (1 of 2)

almcode atag REPT EVT ADSL aid_adsl:cond_adsl,[condeff], [ocrdat],[ocrtm],[locn],[dirn];[cond_descr];	
almcde	Alarm code. Identifies the severity of the alarm. The valid value is: A^: Automatic message (typically reports a cleared alarm)
atag	Automatic tag indicating the numerical sequence of messages reported.
aid_adsl	Access identifier for the ADSL line(s). Enter in the following format, replacing lower-case parameters with the values given: ADSL-rack-shelf-slot-circuit – rack: Rack Number (1) – shelf: Shelf Number (1) – slot: LT Slot Number (1) – circuit: ADSL circuit on the LT (1–24)
cond_adsl	ADSL condition. Valid values are: FACTERM Modem could not initialize (Near End only) LCD-F: Loss of Cell Delineation (fast) (Near End only) LOF: Loss Of Frame LOL: Loss Of Link (Near End only) LORATE: Line rate is below planned rate (Loss of Signal Quality) LOS: Loss Of Signal (Near End only) LPR: Loss of Power (Far End only) LOFS-L: Loss Of Frame Seconds (line) LOLS-L: Loss Of Link Seconds (line) ES-L: Errored Seconds (line) SES-L: Severely Errored Seconds (line) UAS-L: Unavailable Seconds (line) INCRATE-F: Increasing Rate (fast channel). There is no corresponding standing condition clear message. DECRATE-F: Decreasing Rate (fast channel). There is no corresponding standing condition clear message. LPRS-L: Loss Of Power Seconds (line) (Near End only) LOSS-L: Loss Of Signal Seconds (line) (Near End only)
[condeff]	The effect of the event on the condition reported. Valid values are: SC: Standing condition raised CL: Standing condition cleared
ocrdat	Date of occurrence in the format mm-dd.

Table 3-24. REPT EVT ADSL Message Parameters (2 of 2)

almcode atag REPT EVT ADSL aid_adsl:cond_adsl,[condeff], [ocrdat],[ocrtm],[locn],[dirn];[cond_descr];	
ocrtm	Time of occurrence in the format hh-mm.
[locn]	Location of the condition. Valid values are: NEND: Near end FEND: Far end If no value is specified, ALL is assumed.
[dirn]	Signal direction. Valid value is RCV (Receive).
[cond_descr]	Description of alarm condition (40 characters maximum).

RTRV-ADSL

The RTRV-ADSL command retrieves operational parameters configured for ADSL lines.

Table 3-25. RTRV-ADSL Command Parameters

RTRV-ADSL:[tid]:aid_adsl:[ctag]::::[pstf],[sstf];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_adsl	Access identifier for an ADSL line. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: ADSL-rack-shelf-slot-circuit rack: Rack number (1) shelf: Shelf number (1) slot: LT slot number (1) circuit: ADSL circuit on the LT (1–24)
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
[pstf]	Primary state filter. Valid values are: IS: Retrieve In-Service entities only OOS: Retrieve Out-Of-Service entities only Grouping is allowed. If no value is specified, this filter is ignored.
[sstf]	Secondary state filter. This filter is ignored.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-ADSL:[tid]:aid_adsl:[ctag]::::[pstf] */
   "aid_adsl:adsl_nblk:state"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-ADSL:[tid]:aid_adsl:[ctag]::::[pstf] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 3-26. RTRV-ADSL Response Parameters (1 of 2)

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
aid_adsl	As described for command parameters (see Table 3-25, RTRV-ADSL Command Parameters), except that ALL is not used
adsl_nblk	Named parameter block for ADSL line. The block consists of one or more of the following parameters, in any order separated by commas, each followed by an equal sign and a valid value. ADSLPROF: ADSL Line Profile (1–30) ADSLPROFNM: ADSL Line Profile name ATMACCPROFF: ATM access profile index for the ADSL fast channel (numeric index of 2) PORTID: Port identifier (1–32 characters). Indicates the user to whom the port is assigned. QOSCLASSF: Quality of Service for the ADSL Fast channel. Valid value is UBR (Unspecified bit rate). EWL: Equivalent Working Length. Specifies the length of the DSL line. This value is used to limit transmit rates and maximum power settings according to local spectrum management guidelines. EWL is usually specified by the carrier. The values supported are: – 8.5 to 14.5 kft in .5 kft increments – >14.5 kft POTSLVL: POTS Level. Specifies the voltage used to detect the presence of Plain Old Telephone Service (POTS) on the DSL line. The values supported are: – 0 to 74 volts, in 1-volt increments (setting to 74 volts disables POTS detection) – Disable (disables POTS detection)

Table 3-26. RTRV-ADSL Response Parameters (2 of 2)

Parameter	Explanation
adsl_nblk *(continued)*	MXTXPWRDN: Specifies the maximum transmission power settings for the ATU-C. The maximum transmit power range may be limited according to local guidelines when spectrum management is enabled. The values (configurable in 1 dB increments) supported are: +12 to –14 dB (default is +12 dB) MXTXPWRUP: Specifies the maximum transmission power settings for the ATU-R. The maximum transmit power range may be limited according to local guidelines when spectrum management is enabled. The values (configurable in 1 dB increments) supported are +12 to –14 dB (default is +12 dB)
state	State from the Bellcore state model. Values are: IS-NR: In service, normal OOS-AU: Out of service, autonomous OOS-MA: Out of service, management (transitory state, changes to OOS-AUMA) OOS-AUMA: Out of service, management and autonomous
[sst]	As described for command parameters (see Table 3-25, RTRV-ADSL Command Parameters).
errcde	Error code (see Appendix A, *Error Codes*)

Example

Retrieve ADSL configuration for data rack 1, shelf 1, slot 1, circuit 9.

```
RTRV-ADSL:TAMPA:ADSL-1-1-1-9:42::::;

   TAMPA 02-03-24 12:30:43
M  42 COMPLD
   /* RTRV-ADSL:TAMPA:ADSL-1-1-1-9:42::::  */
   "ADSL-1-1-1-9:ADSLPROF=4,QOSCLASSF=UBR,:IS"
;
```

Related Commands

DLT-PROFILE-ADSL on page 3-6

ED-ADSL on page 3-10

ED-PROFILE-ADSLDN on page 3-14

ED-PROFILE-ADSLUP on page 3-19

ENT-PROFILE-ADSL on page 3-24

RTRV-PROFILE-ADSL on page 3-40

RTRV-PROFILE-ADSLDN on page 3-44

RTRV-PROFILE-ADSLUP on page 3-50

RTRV-ATUR

The RTRV-ATUR command retrieves operational parameters configured for the ADSL ATU-R.

Table 3-27. RTRV-ATUR Command Parameters

RTRV-ATUR:[tid]:aid_atur:[ctag];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_atur	Access identifier for an ADSL line. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: ATUR-rack-shelf-slot-circuit rack: Rack number (1) shelf: Shelf number (1) slot: LT slot number (1) circuit: ADSL circuit on the LT (1–24)
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-ATUR:[tid]:aid_atur:[ctag] */
   aid_atur:atur_nblk
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-ATUR:[tid]:aid_atur:[ctag] */
   errcde
;
```

Table 3-28. RTRV-ATUR Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_atur	As described for command parameters (see Table 3-27, RTRV-ATUR Command Parameters), except that ALL is not used
adsl_nblk	Named parameter block for ADSL line. The block consists the following parameter and a valid value. CURSWER: Installed version of software (1–32 characters). If equipment is not installed or no software is available, no value is shown.

Example

Retrieve ATU-R configuration data for rack 1, shelf 1, slot 1, circuit 9.

```
RTRV-ATUR:TAMPA:ATUR-1-1-1-9:42::::;

   TAMPA 02-03-24 12:30:43
M  42 COMPLD
   /* RTRV-ATUR:TAMPA:ATUR-1-1-1-9:42::::  */
   ATUR-1-1-1-9,R1.01:01
;
```

Related Commands

None

RTRV-PM-ADSL

The RTRV-PM-ADSL command retrieves performance monitoring data for selected ADSL lines.

Table 3-29. RTRV-PM-ADSL Command Parameters (1 of 2)

RTRV-PM-ADSL:[tid]:aid_adsl:[ctag]::[monadsl],[monlev], [locn],,[tmper],[mondat],[montm];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_adsl	Access identifier for an ADSL line. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: ADSL-rack-shelf-slot-circuit rack: Rack number (1) shelf: Shelf number (1) slot: LT slot number (1) circuit: ADSL circuit on the LT (1–24) Grouping and ranging are allowed.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
[monadsl]	Monitored parameter. Valid values are: CV-F: Code violations (fast channel) DHECV-F: Discarded cells due to HEC violations (fast channel) ES-L: Errored Seconds (line) LOF-L: Loss Of Frame seconds (line) LOL-L: Loss Of Link seconds (line) LOS-L: Loss Of Signal seconds (line) LPR-L: Loss Of Power seconds (line) UAS-L: Unavailable Seconds (line) Grouping is allowed. If no value is specified, ALL is assumed.
[monlev]	Threshold level. Use the format lev-dirn. Valid values are: lev: Level (0–32767) dirn: Direction (UP, DN) If no value is specified, 1-UP is assumed.
[tmper]	Time period. The valid value is 15-MIN (15 minutes).
[monrdat]	Start date for the monitoring period in the format mm-dd. Or enter ALL (all performance monitoring data is retrieved). The default is the current date.

Table 3-29. RTRV-PM-ADSL Command Parameters (2 of 2)

RTRV-PM-ADSL:[tid]:aid_adsl:[ctag]::[monadsl],[monlev], [locn],,[tmper],[mondat],[montm];	
[montm]	Start time for the monitoring period in the format hh-mm, where hh is 00-23 and mm is 0, 15, 30, or 45. Or enter ALL (all performance monitoring data is retrieved). The default is the value nearest the current time. Grouping is allowed.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /*
RTRV-PM-ADSL:[tid]:aid_adsl:[ctag]::[monadsl],[monlev],
[locn],,[tmper],[mondat],[montm] */
   "aid_adsl,{aidtype]:monadsl,monval,,locn,,tmper,
mondat,montm"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /*
RTRV-PM-ADSL:[tid]:aid_adsl:[ctag]::[monadsl],[monlev],
[locn],,[tmper],[mondat],[montm] */
   errcde
;
```

Table 3-30. RTRV-PM-ADSL Response Parameters (1 of 2)

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied

Table 3-30. RTRV-PM-ADSL Response Parameters (2 of 2)

Parameter	Explanation
/* */	Enclosed are human readable comments – unspecified format
aid_adsl	As described for command parameters (see Table 3-29, RTRV-PM-ADSL Command Parameters), except that ALL is not used.
[aid_type]	Type of AID. The value is ADSL.
monadsl	As described for command parameters (see Table 3-29, RTRV-PM-ADSL Command Parameters), except that ALL is not used.
monval	Measured value for the monitored parameter (0–4294967295).
[locn]	As described for command parameters (see Table 3-29, RTRV-PM-ADSL Command Parameters).
[tmper]	As described for command parameters (see Table 3-29, RTRV-PM-ADSL Command Parameters).
[mondat]	As described for command parameters (see Table 3-29, RTRV-PM-ADSL Command Parameters), except that ALL is not used.
[montm]	As described for command parameters (see Table 3-29, RTRV-PM-ADSL Command Parameters), except that ALL is not used.
errcde	Error code (see Appendix A, *Error Codes*)

Example

Retrieve the near-end errored seconds (fast channel) count above 5187 on ADSL rack 1, shelf 1, slot 1, circuit 9 for a 15-minute period beginning at 6:30 a.m. on June 10.

```
RTRV-PM-ADSL:TAMPA:ADSL-1-1-1-9:42::::;

   TAMPA 02-07-03 12:30:43
M  42 COMPLD
   /*
RTRV-PM-ADSL:TAMPA:ADSL-1-1-1-9:42:::ES-F,5187-UP,NEND,,15-M
IN,06-10,6-30:  */
   "ADSL-1-1-1-9:ES-F,2015,,NEND,,15-MIN,06-10,6-30"
;
```

Related Commands

ED-ADSL on page 3-10

RTRV-PROFILE-ADSL

The RTRV-PROFILE-ADSL command retrieves information about ADSL line configuration profiles.

Table 3-31. RTRV-PROFILE-ADSL Command Parameters

RTRV-PROFILE-ADSL:[tid]:adsl_profile_id:[ctag][::,profile_scope];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE.The default value is null. The NE SID code is the only other valid value.
adsl_profile_id	ADSL profile index (1–30). Grouping and ranging are allowed. ALL may be used.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
[profile_scope]	Scope of the profile. The valid value is LOCAL (local to this stack only). If no value is specified, this parameter is ignored (all values are reported).

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-PROFILE-ADSL:[tid]:adsl_profile_id:[ctag]
[::,profile_scope] */
 adsl_profile_id:profile_name,profile_scope,latency,
profile_state
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-PROFILE-ADSL:[tid]:adsl_profile_id:[ctag]
[::,profile_scope] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 3-32. RTRV-PROFILE-ADSL Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
adsl_profile_id	As described for command parameters, except that ALL is not used
profile_name	Name (32 characters maximum) that uniquely identifies the profile within its scope
profile_scope	As described for command parameters
latency	Latency of the ADSL line. Only single latency is supported upstream and downstream. The valid value is FAST (only ADSL FAST supported).
profile_state	State of the profile (ADSL profiles only). Values are: CONFIG: Profile is currently being created. It can be configured, but not used. ACTIVE: Profile has been activated and is ready for use and is configured.
errcde	Error code (see Appendix A, *Error Codes*)

Example

Retrieve profile 5.

```
RTRV-PROFILE-ADSL:TAMPA:5:42;

   TAMPA 02-07-24 12:30:43
M  42 COMPLD
   /* RTRV-PROFILE-ADSL:TAMPA:5:42 */
   5:LOCAL:TAMPA101:CONFIG
;
```

Related Commands

ACT-PROFILE-ADSL on page 3-2

DLT-PROFILE-ADSL on page 3-6

ENT-PROFILE-ADSL on page 3-24

RTRV-PROFILE-ADSLALM

The RTRV-PROFILE-ADSLALM command retrieves information about ADSL alarm configuration profiles.

Table 3-33. RTRV-PROFILE-ADSLALM Command Parameters

RTRV-PROFILE-ADSLALM:[tid]:adsl_profile_id:[ctag][::,profile_scope];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
adsl_profile_id	ADSL profile index (1–30). Grouping and ranging are allowed. ALL may be used.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
[profile_scope]	Scope of the profile. The valid value is LOCAL (local to this stack only). If no value is specified, this parameter is ignored (all values are reported).

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-PROFILE-ADSLALM:[tid]:adsl_profile_id:[ctag]
[::,profile_scope] */
 adsl_profile_id:profile_name,profile_scope, profile_state
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-PROFILE-ADSLALM:[tid]:adsl_profile_id:[ctag]
[::,profile_scope] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 3-34. RTRV-PROFILE-ADSLALM Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
adsl_profile_id	As described for command parameters, except that ALL is not used
profile_name	Name (32 characters maximum) that uniquely identifies the profile within its scope
profile_scope	As described for command parameters
profile_state	State of the profile (ADSL alarm profiles only). Values are: CONFIG: Profile is currently being created. It can be configured, but not used. ACTIVE: Profile has been activated and is ready for use and is configured.
errcde	Error code (see Appendix A, *Error Codes*)

Example

Retrieve alarm profile 5.

```
RTRV-PROFILE-ADSLALM:TAMPA:5:42;

   TAMPA 02-07-24 12:30:43
M  42 COMPLD
   /* RTRV-PROFILE-ADSLALM:TAMPA:5:42 */
   5:LOCAL:TAMPA101:CONFIG
;
```

Related Commands

ACT-PROFILE-ADSLALM on page 3-4

DLT-PROFILE-ADSLALM on page 3-8

ED-PROFILE-ADSLDNALM on page 3-16

ED-PROFILE-ADSLUPALM on page 3-21

ENT-PROFILE-ADSLALM on page 3-26

RTRV-PROFILE-ADSLALM on page 3-42

RTRV-PROFILE-ADSLDN

The RTRV-PROFILE-ADSLDN command enables you to retrieve ADSL line configuration parameters associated with the downstream direction (from ATU-C to ATU-R) in an ADSL Profile. See **ED-PROFILE-ADSLDN** on page 3-14 for information on how to create a new ADSL profile.

Table 3-35. RTRV-PROFILE-ADSLDN Command Parameters

RTRV-PROFILE-ADSLDN:[tid]:adsl_profile_id:[ctag][::,profile_scope];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
adsl_profile_id	Numeric identifier of a profile (1–30).
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
profile_scope	The scope of a profile. The valid value is LOCAL (local to this stack only). If no parameter is specified, this value is ignored (all values are reported).

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /*
RTRV-PROFILE-ADSLDN:[tid]:adsl_profile_id:[ctag]:[::,profile
_scope] */
   adsl_profile_id:profile_scope:profile_name:adslprof_nblk
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /*
RTRV-PROFILE-ADSLDN:[tid]:adsl_profile_id:[ctag][::profile_
scope] */
   errcde
;
```

Table 3-36. RTRV-PROFILE-ADSLDN Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
adsl_profile_id	As described for command parameters (see Table 3-35, RTRV-PROFILE-ADSLDN Command Parameters), except that ALL is not used.
profile_scope	As described for command parameters (see Table 3-35, RTRV-PROFILE-ADSLDN Command Parameters).
profile_name	A string of up to 32 characters that uniquely identifies the profile within its scope.
[adslprof_nblk]	ADSL parameter block containing one or more of the following named parameters (separated by commas): PFBR: Planned fast channel bit rate in kilobits per second (32–2176). MAXFBR: Maximum fast-channel bit rate in kilobits per second (32–2176). MINFBR: Minimum fast-channel bit rate in kilobits per second (32). MAXNMR: Maximum additional noise margin (16 dB). MINNMR: Minimum additional noise margin (0 dB). RAMODE: Rate adaptive mode. The valid values is AT_RUN (automatically selected at run time). TNMR: Target noise margin (3–14 dB). If not specified, the values of these parameters remain unchanged.
errcde	Error code (see Appendix A, *Error Codes*)

Example

Retrieve profile 6.

```
RTRV-PROFILE-ADSLDN:TAMPA:6:42;

   TAMPA 02-07-24 12:30:43
M  42 COMPLD
   /* RTRV-PROFILE-ADSLDN:TAMPA:6 */
   6:LOCAL:TAMPA101:MINNMR=0,MAXNMR=16,TNMR=5,RAMODE=AT_RUN,
   PFBR=32,MAXFBR=2176,MINFBR=32

;
```

Related Commands

ED-PROFILE-ADSLDN on page 3-14

RTRV-PROFILE-ADSLDNALM

The RTRV-PROFILE-ADSLDNALM command enables you to retrieve ADSL alarm configuration parameters associated with the downstream direction (from ATU-C to ATU-R) in an ADSL Profile. See **ENT-PROFILE-ADSL** on page 3-24 for information on how to create a new ADSL profile.

Table 3-37. RTRV-PROFILE-ADSLDNALM Command Parameters

RTRV-PROFILE-ADSLDNALM:[tid]:adsl_profile_id:[ctag][::,profile_scope];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
adsl_profile_id	Numeric identifier of a profile (1–30).
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
profile_scope	The scope of a profile. The valid value is LOCAL (local to this stack only). If no parameter is specified, this value is ignored (all values are reported).

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /*
RTRV-PROFILE-ADSLDNALM:[tid]:adsl_profile_id:[ctag]:[::,profile_scope] */
   adsl_profile_id:profile_scope:profile_name:adslprof_nblk
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /*
RTRV-PROFILE-ADSLDNALM:[tid]:adsl_profile_id:[ctag][::profile_ scope] */
   errcde
;
```

Table 3-38. RTRV-PROFILE-ADSLDNALM Response Parameters (1 of 2)

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
adsl_profile_id	As described for command parameters (see Table 3-37, RTRV-PROFILE-ADSLDNALM Command Parameters), except that ALL is not used.
profile_scope	As described for command parameters (see Table 3-37, RTRV-PROFILE-ADSLDNALM Command Parameters).
profile_name	A string of up to 32 characters that uniquely identifies the profile within its scope.
[adslprof_nblk]	ADSL parameter block containing one or more of the following named parameters (separated by commas): LOFS-L: Loss Of Frame Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of LOFS events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. LPRS-L: Loss Of Power Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of LPRS events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. ES-L: Errored Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of ES events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. SES-L: Severely Errored Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of SES events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. UAS-L: Unavailable Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of UAS events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. INCRATE-F: Increasing Rate (fast channel). SNMP rate change trap and TL1 autonomous message are sent if the current rate is ≥ the previous rate plus this threshold (0-2176 kbps in 32 kbps increments, where 0 disables the messages). The default is 0.

Table 3-38. RTRV-PROFILE-ADSLDNALM Response Parameters (2 of 2)

Parameter	Explanation
[adslprof_nblk] *(continued)*	DECRATE-F: Decreasing Rate (fast channel). SNMP rate change trap and TL1 autonomous message are sent if the current rate is ≤ the previous rate minus this threshold (0-2176 kbps in 32 kbps increments, where 0 disables the messages). The default is 0. If not specified, the values of these parameters remain unchanged.
errcde	Error code (see Appendix A, *Error Codes*)

Example

Retrieve profile 6.

```
RTRV-PROFILE-ADSLDNALM:TAMPA:6:42;

   TAMPA 02-07-24 12:30:43
M  42 COMPLD
   /* RTRV-PROFILE-ADSLDN:TAMPA:6 */

6:LOCAL:TAMPA101:LOFS-L=0,LPRS-L=0,LOL-L=0,ES-L=120,SES-L=15
,
UAS-L=0,INCRATE-F=0,DECRATE-F=0

;
```

Related Command

ED-PROFILE-ADSLDNALM on page 3-16

ENT-PROFILE-ADSL on page 3-24

RTRV-PROFILE-ADSLUP

The RTRV-PROFILE-ADSLUP command enables you to retrieve ADSL line configuration parameters associated with the upstream direction (from ATU-R to ATU-C) in an ADSL Profile. See **ENT-PROFILE-ADSL** on page 3-24 for information on how to create a new ADSL profile.

Table 3-39. RTRV-PROFILE-ADSLUP Command Parameters

RTRV-PROFILE-ADSLUP:[tid]:adsl_profile_id:[ctag][::,profile_scope];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
adsl_profile_id	Numeric identifier of a profile (1–30).
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
profile_scope	The scope of a profile. The valid value is LOCAL (local to this stack only). If no parameter is specified, this value is ignored (all values are reported).

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /*
RTRV-PROFILE-ADSLUP:[tid]:adsl_profile_id:[ctag]:[::,profile
_scope] */
   adsl_profile_id:profile_scope:profile_name:adslprof_nblk
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /*
RTRV-PROFILE-ADSLUP:[tid]:adsl_profile_id:[ctag][::profile_
scope] */
   errcde
;
```

Table 3-40. RTRV-PROFILE-ADSLUP Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
adsl_profile_id	As described for command parameters (see Table 3-39, RTRV-PROFILE-ADSLUP Command Parameters), except that ALL is not used.
profile_scope	As described for command parameters (see Table 3-39, RTRV-PROFILE-ADSLUP Command Parameters).
profile_name	A string of up to 32 characters that uniquely identifies the profile within its scope.
[adslprof_nblk]	ADSL parameter block containing one or more of the following named parameters (separated by commas): MAXFBR: Maximum fast-channel bit rate in kilobits per second (32–2176). MINFBR: Minimum fast-channel bit rate in kilobits per second (32). MAXNMR: Maximum additional noise margin (16 dB). MINNMR: Minimum additional noise margin (0 dB). RAMODE: Rate adaptive mode. Valid values are: – AT_RUN: Automatically selected at run time (default). – PFBR: Planned fast channel bit rate in kilobits per second (32–2176). TNMR: Target noise margin (3–14 dB). If not specified, the values of these parameters remain unchanged.
errcde	Error code (see Appendix A, *Error Codes*)

Example

Retrieve profile 6.

```
RTRV-PROFILE-ADSLUP:TAMPA:6:42;

   TAMPA 02-07-24 12:30:43
M  42 COMPLD
   /* RTRV-PROFILE-ADSLUP:TAMPA:6 */

6:LOCAL:TAMPA101:MINNMR=0,MAXNMR=16,TNMR=5,RAMODE=AT_RUN,PFB
R=160,MAXFBR=0,MINFBR=32

;
```

Related Commands

ED-PROFILE-ADSLUP on page 3-19

ENT-PROFILE-ADSL on page 3-24

RTRV-PROFILE-ADSLUPALM

The RTRV-PROFILE-ADSLUPALM command enables you to retrieve ADSL alarm configuration parameters associated with the downstream direction (from ATU-C to ATU-R) in an ADSL Profile. See **ENT-PROFILE-ADSLALM** on page 3-26 for information on how to create a new ADSL profile.

Table 3-41. RTRV-PROFILE-ADSLUPALM Command Parameters

RTRV-PROFILE-ADSLUPALM:[tid]:adsl_profile_id:[ctag][;:,profile_scope];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
adsl_profile_id	Numeric identifier of a profile (1–30).
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
profile_scope	The scope of a profile. The valid value is LOCAL (local to this stack only). If no parameter is specified, this value is ignored (all values are reported).

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /*
RTRV-PROFILE-ADSLUPALM:[tid]:adsl_profile_id:[ctag]:[::,profile_scope] */
   adsl_profile_id:profile_scope:profile_name:adslprof_nblk
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /*
RTRV-PROFILE-ADSLUPALM:[tid]:adsl_profile_id:[ctag][::profile_ scope] */
   errcde
;
```

Table 3-42. RTRV-PROFILE-ADSLUPALM Response Parameters (1 of 2)

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
adsl_profile_id	As described for command parameters (see Table 3-41, RTRV-PROFILE-ADSLUPALM Command Parameters), except that ALL is not used.
profile_scope	As described for command parameters (see Table 3-41, RTRV-PROFILE-ADSLUPALM Command Parameters).
profile_name	A string of up to 32 characters that uniquely identifies the profile within its scope.
[adslprof_nblk]	ADSL parameter block containing one or more of the following named parameters (separated by commas): LOFS-L: Loss Of Frame Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of LOFS events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. LOSS-L: Loss Of Signal Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of LOSS events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. LOLS-L: Loss Of Link Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of LOLS events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. ES-L: Errored Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of ES events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. SES-L: Severely Errored Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of SES events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. UAS-L: Unavailable Seconds (line). SNMP trap and TL1 autonomous message are sent if the number of UAS events in a 15-minute interval meets or exceeds the selected value (0–900 seconds, where 0 disables the messages). The default is 0. INCRATE-F: Increasing Rate (fast channel). SNMP rate change trap and TL1 autonomous message are sent if the current rate is ≥ the previous rate plus this threshold (0-2176 kbps in 32 kbps increments, where 0 disables the messages). The default is 0.

Table 3-42. RTRV-PROFILE-ADSLUPALM Response Parameters (2 of 2)

Parameter	Explanation
[adslprof_nblk] *(continued)*	DECRATE-F: Decreasing Rate (fast channel). SNMP rate change trap and TL1 autonomous message are sent if the current rate is ≤ the previous rate minus this threshold (0-2176 kbps in 32 kbps increments, where 0 disables the messages). The default is 0. INITFAIL: Initialization Failure. Enables or disables InitFailureTrap messages specified in RFC 2662. – Y: Enable Initialization Failure Trap messages only. – N: Disable Initialization Failure Trap messages only (Default). If not specified, the values of these parameters remain unchanged.
errcde	Error code (see Appendix A, *Error Codes*)

Example

Retrieve profile 6.

```
RTRV-PROFILE-ADSLUPALM:TAMPA:6:42;

   TAMPA 02-07-24 12:30:43
M  42 COMPLD
   /* RTRV-PROFILE-ADSLUPALM:TAMPA:6 */
6:LOCAL:TAMPA101:LOFS-L=0,LOSS=0,LOLS=0,ES-L=120,SES-L=15,
UAS-L=0,INCRATE-F=0,DECRATE-F=0,INIT=N

;
```

Related Command

ED-PROFILE-ADSLUPALM on page 3-21

ENT-PROFILE-ADSLALM on page 3-26

DS1 Facility Commands

4

Overview

This chapter contains the following DS1 Facility commands:

ED-T1

The ED-T1 Command edits configuration data associated with a DS1 facility.

Table 4-1. ED-T1 Command Parameters (1 of 2)

ED-T1:[tid]:aid_ds1:[ctag]:::[ds1_nblk]:[pst];	
Restrictions: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_ds1	Access Identifier for a DS1 facility. The value can be preceded with AID=, but this is not required. Enter in the following format, replacing lower-case parameters with the values given: NTT1-circuit – circuit: DS1 circuit on the NT (1)
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
[ds1_nblk]	Named parameter block for DS1. The block consists of one or more of the following parameters, in any order separated by commas, each followed by an equal sign and a valid value. If not specified, the values of these parameters remain unchanged. EQLZ: Line equalization (DSX1 interfaces only). See Table 4-4, T1 Line Equalization Values. LBO: Line build-out in dB (T1 interfaces only). Valid values are 0 (default), 7.5, 15, and 22.5. LINETYPE: Type of line interface used. Valid values are: – G703SHORT120: For E1 model. G.703 short-haul (≤655 feet) interface (120 ohm connector). – DSX1: For T1 model. T1 short-haul (≤655 feet) interface. – G703LONG: For E1 model. G.703 long-haul (>655 feet) interface (120 ohm connector). Default for E1 models. – T1: T1 power loop. For T1 model. T1 long-haul (>655 feet) interface. Default for T1 models. – G703SHORT75: For E1 model. G.703 short-haul (≤655 feet) interface (75 ohm connector). TMG: Timing supply – INT: Internal timing source. Use the NE system timing source. – LPD: Loop timing (default) PORTID: Port identifier (32 characters maximum). Indicates the user to whom the port is assigned. The following values are reserved and cannot be used: – AVAILABLE: Port is not assigned. – FAILED: Port has failed and cannot be assigned (default is null).

Table 4-1. ED-T1 Command Parameters (2 of 2)

ED-T1:[tid]:aid_ds1:[ctag]:::[ds1_nblk]:[pst];	
[ds1_nblk]	For the following parameters if no value is specified, null is assumed.
(continued)	ATMACCPROF: ATM Access Profile index (1). This value determines the range of values for vpi and vci in several other commands. The value cannot be changed while any VPLs or VCLs exist. ATMACCPROFNM: ATM Access Profile name. The default is LT DEFVAL. QOSCLASS: Quality of service of connections on this port. The valid value is UBR (UBR connections only).
[pst]	Desired state. Valid values are: – IS: In service – OOS: Out of service. OOS-MA (out of service, management) is implied. If no value is specified, this parameter remains unchanged.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ED-T1:[tid]:aid_ds1:[ctag]:::[ds1_nblk]:[pst] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* ED-T1:[tid]:aid_ds1:[ctag]:::[ds1_nblk]:[pst] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 4-2. ED-T1 Command Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Edit circuit 1 on the NT to have a line interface type of T1.

```
ED-T1:TAMPA:NTT1-1:42:::LINETYPE=T1;

   TAMPA 00-11-24 12:30:43
M  42 COMPLD
   /* ED-T1:TAMPA:NTT1-1:42:::LINETYPE=T1 */
;
```

Related Commands

ENT-T1 on page 4-5

RTRV-T1 on page 4-15

ENT-T1

The ENT-T1 command enters or initializes the configuration data associated with a DS-1 facility.

Table 4-3. ENT-T1 Command Parameters (1 of 2)

ENT-T1:[tid]:aid_ds1:[ctag]:::ds1_nblk:[pst];	
Restrictions: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_ds1	Access Identifier for a DS1 facility. The value can be preceded with AID=, but this is not required. Enter in the following format, replacing lower-case parameters with the values given: NTT1-circuit – circuit: Circuit in the NT (1)
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
ds1_nblk	Named parameter block for DS1 facility. The block consists of one or more of the following parameters, in any order separated by commas, each followed by an equal sign and a valid value. EQLZ: Line equalization (T1 short haul interfaces only). See Table 4-4, T1 Line Equalization Values. Default is 0. LBO: Line build-out in dB (T1 long haul interfaces only). Valid values are 0 (default), 7.5, 15, and 22.5. LINETYPE: Type of line interface used. Valid values are: – G703SHORT120: For E1 model. G.703 short-haul (≤655 feet) interface (120 ohm connector). – DSX1: For T1 model. T1 short-haul (≤655 feet) interface. – G703LONG: For E1 model. G.703 long-haul (>655 feet) interface (120 ohm connector). Default for E1 models. – T1: T1 power loop. For T1 model. T1 long-haul (>655 feet) interface. Default for T1 models. – G703SHORT75: For E1 model. G.703 short-haul (≤655 feet) interface (75 ohm connector). TMG: Timing supply – INT: Internal timing source. Use the NE system timing source. – LPD: Loop timing (default) QOSCLASS: Quality of service of connections on this port. The valid value is UBR (UBR connections only). PORTID: Port identifier (32 characters maximum). Indicates the user to whom the port is assigned. The following values are reserved and cannot be used: – AVAILABLE: Port is not assigned. FAULTY: Port has failed and cannot be assigned (default is null).

Table 4-3. ENT-T1 Command Parameters (2 of 2)

ENT-T1:[tid]:aid_ds1:[ctag]:::ds1_nblk:[pst];	
ds1_nblk	For the following parameters if no value is specified, null is assumed.
(continued)	ATMACCPROF: ATM Access Profile index (1). This value determines the range of values for vpi and vci in several other commands. The value cannot be changed while any VPLs or VCLs exist.
	ATMACCPROFNM: ATM Access Profile name. The default is NT DEFVAL.
	QOSCLASS: Quality of service of connections on this port. The valid
[pst]	Desired state. Valid values are:
	IS: In service (default)
	OOS: Out of service. OOS-MA (out of service, management) is implied.
	If no value is specified, this parameter is set to IS.

Table 4-4. T1 Line Equalization Values

EQLZ value	Cable length (feet)	Equalization (dB)
0 (default)	0–133	0.6
200	134–266	1.2
300	267–399	1.8
500	400–533	2.4
600	534–655	3.0

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ENT-T1:[tid]:aid_ds1:[ctag]:::ds1_nblk:[pst] */
;
```

Error Response

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* ENT-T1:[tid]:aid_ds1:[ctag]:::ds1_nblk:[pst] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 4-5. ENT-T1 Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Enter circuit 1 on the NT with a line interface type of T1.

```
ENT-T1:TAMPA:NTT1:42:::LINETYPE=T1;
```

```
   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* ENT-T1:TAMPA:NTT1:42:::LINETYPE=T1 */
;
```

Related Commands

ED-T1 on page 4-2

RTRV-T1 on page 4-15

REPT ALM T1

The REPT ALM T1 message reports current T1 (DS1) facility alarms from the NE.

Table 4-6. REPT ALM T1 Response Parameters

almcode atag REPT ALM T1 "aid_ds1:ntfncde,cond_ds1, serveff,[ocrdat],[ocrtm],[locn],[dirn]:[cond_descr]";	
almcde	Alarm code. Identifies the severity of the alarm. Values are: *C: Critical alarm **: Major alarm *^: Minor alarm A^: Automatic message (typically used to report a cleared alarm)
atag	Automatic tag that indicates the numerical sequence of messages reported.
aid_ds1	Access identifier for an environment. Values are: NTT1-circuit – circuit: DS1 circuit in the NT (1)
ntfncde	Notification code. Values are: CR: Critical alarm MJ: Major alarm MN: Minor alarm CL: Cleared alarm
cond_ds1	DS1 facility condition. Values are: ACTLPBK: Facility placed in loopback AIS: Alarm indication signal LCD: Loss of ATM cell delineation LOF: Loss of framing LOS: Loss of signal/clock RAI: Remote alarm indication
serveff	Service effect. Values are: SA: Service affecting NSA: Not service affecting
[ocrdat]	Date of occurrence in the format: mm-dd (month and day)
[ocrtm]	Time of occurrence in the format: hh-mm (hour 0–23 and minute 0–59)
[locn]	Location of condition. The value is NEND (Near End).
[dirn]	Direction of condition. Values are: RCV: Receive TRMT: Transmit (for ACTLPBK)
[cond_descr]	Description of alarm condition (40 characters maximum).

REPT EVT T1

The REPT EVT T1 message reports current T1 (DS1) facility events from the NE.

Table 4-7. REPT EVT T1 Response Parameters

almcode atag REPT EVT T1 "aid_ds1:ntfncde,cond_ds1, serveff,[ocrdat],[ocrtm],[locn],[dirn]:[cond_descr]";	
almcde	Alarm code. Identifies the severity of the alarm. Values are: *C: Critical alarm **: Major alarm *^: Minor alarm A^: Automatic message (typically used to report a cleared alarm)
atag	Automatic tag that indicates the numerical sequence of messages reported.
aid_ds1	Access identifier for an environment. Values are: NTT1-circuit – circuit: DS1 circuit in the NT (1)
ntfncde	Notification code. Values are: CR: Critical alarm MJ: Major alarm MN: Minor alarm CL: Cleared alarm
cond_ds1	DS1 facility condition. Values are: ACTLPBK: Facility placed in loopback AIS: Alarm indication signal LCD: Loss of ATM cell delineation LOF: Loss of framing LOS: Loss of signal/clock RAI: Remote alarm indication
serveff	Service effect. Values are: SA: Service affecting NSA: Not service affecting
[ocrdat]	Date of occurrence in the format: mm-dd (month and day)
[ocrtm]	Time of occurrence in the format: hh-mm (hour 0–23 and minute 0–59)
[locn]	Location of condition. The value is NEND (Near End).
[dirn]	Direction of condition. Values are: RCV: Receive TRMT: Transmit (for ACTLPBK)
[cond_descr]	Description of alarm condition (40 characters maximum).

REPT-OPSTAT-T1

The REPT-OPSTAT-T1 command reports current operational parameters for T1 (DS1) lines.

Table 4-8. REPT-OPSTAT- T1 Command Parameters

REPT-OPSTAT-T1:[tid]:aid_dsl:[ctag][;];	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_ds1	Access identifier for a a DS1 facility. The value can be preceded with AID=, but this is not required. Enter in the following format, replacing lower-case parameters with the values given: NTT1-circuit – circuit: DS1 circuit in the NT (1)
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* REPT-OPSTAT-T1:[tid]:aid_ds1:[ctag][:] */
;
```

Error Response

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* REPT-OPSTAT-T1:[tid]:aid_ds1:[ctag][:] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 4-9. REPT-OPSTAT-T1 Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_ds1	As described for command parameters (see Table 4-8, REPT-OPSTAT-T1 Command Parameters).
op_ds1	DS1 operational parameter. Values are: INCELLS: Rolling count of cells received on this facility. OUTCELLS: Rolling count of cells transmitted on this facility and discarded for any reason. INCELLSUKN: Rolling count of cells received on this facility and discarded during header validation with unrecognized VPI/VCI values. OCD: Rolling count of Out of Cell Delineation events on this facility. STATUSCD: Current status of cell delineation state. Values are: – Normal: No failure condition – LOCD: Loss Of Cell Delineation
value	Value of parameter specified by op_ds1.

Example

Report DS1 facility operational parameters for NTT1-3.

```
REPT-OPSTAT-T1:TAMPA:NTT1-1;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* REPT-OPSTAT-T1:TAMPA:NTT1-1:42 */
"NTT1-3:INCELLS,35500"
"NTT1-3:OUTCELLS,23300"
;
```

Related Commands

None

RTRV-PM-T1

The RTRV-PM-T1 command retrieves DS1 performance monitoring data.

Table 4-10. RTRV-PM-T1 Command Parameters (1 of 2)

RTRV-PM-T1:[tid]:aid_ds1:[ctag]::[monds1],[monlev],[locn],,[tmper],[mondat],[montm];	
Restrictions: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
aid_ds1	Access identifier for the environment. Enter in the following format, replacing lower-case parameters with the values given: NTT1-circuit – circuit: DS1 circuit on the NT (1)
[ctag]	The correlation tag that correlates an input command with its associated output response(s). It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.
[monds1]	Monitored parameter. Valid values are: CV-L: Line code violations ES-L: Line errored seconds CV-P: Path coding violations ES-P: Path errored seconds ESB-P: Path errored seconds, type B (bursty errored seconds) SES-P: Path severely errored seconds UAS-P: Path unavailable seconds SEFS-P: Path severely errored framing seconds DHECV: Discarded cells due to HEC violation Grouping is allowed. If no value is specified, ALL is assumed.
[monlev]	Threshold level. Valid values are: lev-dirn – lev: level (0–4294967295) – dirn: direction. Values are UP and DN. If no value is specified, 1-UP is assumed.
[locn]	Location of the facility. Valid values are: NEND: Near end FEND: Far end (not supported on G.703 interfaces) If no value is specified, this parameter is not used for filtering responses.
[tmper]	Time period. The only valid value is 15-MIN (15 minutes).

Table 4-10. RTRV-PM-T1 Command Parameters (2 of 2)

RTRV-PM-T1:[tid]:aid_ds1:[ctag]::[monds1],[monlev],[locn],,[tmper],[mondat],[montm];	
[mondat]	Start date for the monitoring period. Valid values are: mm-dd: Month and day – mm: Month (1–12) – dd: Day (1–31) ALL: All performance monitoring data is retrieved If no value is specified, today's date is assumed.
[montm]	Start time for the monitoring period. Valid values are: hh-mm: Hour and minute – hh: Hour (00–23) – mm: Minute. Valid values are 0, 15, 30, and 45. ALL: All performance monitoring data is retrieved If no value is specified, the nearest value to the current time is assumed. Grouping is allowed. Statistics will not be aligned with the wall clock. Statistics will be monitored for the interval in which the selected monitoring period falls.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-PM-T1:[tid]:aid_ds1:[ctag]::[monds1],[monlev],
   [locn],,[tmper],[mondat],[montm] */
   "aid_ds1,[aid_type]:monds1,monval,,[locn],,[tmper],
   [mondat],[montm]"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /*
RTRV-PM-T1:[tid]:aid_ds1:[ctag]::[monds1],[monlev],[locn],,
[tmper],[mondat],[montm] */
   errcde
;
```

Table 4-11. RTRV-PM-T1 Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
aid_ds1	As described for command parameters, except that DS3NT is not used
[aid_type]	Type of AID. The value is T1.
monds3	As described for command parameters, except that ALL is not used
monval	Measured value for the monitored parameter (0–4294967295)
[locn]	As described for command parameters
[tmper]	As described for command parameters
[mondat]	As described for command parameters, except that ALL is not used
[montm]	As described for command parameters, except that ALL is not used
errcde	Error code (see Appendix A, *Error Codes*)

Example

Retrieve the near-end alarm indication signal count above 4096 for a 15-minute period beginning at 8:30 a.m. on January 10.

```
RTRV-PM-T1:TAMPA:DS1NTA:42::AIS,4096-UP,NEND,,15-MIN,01-10,08-30;

   TAMPA 02-01-24 12:30:43
M  42 COMPLD
   /*
RTRV-PM-T1:TAMPA:DS1NTA:42::AIS,4096-UP,NEND,,15-MIN,01-10,08-30  */
   "DS1NTA:AIS,2015,,NEND,,15-MIN,01-10,08-30"
;
```

Related Command

RTRV-ALM-T1 on page 10-12

RTRV-T1

The RTRV-T1 command retrieves the configuration data associated with a DS-1 facility.

Table 4-12. RTRV-T1 Command Parameters

RTRV-T1:[tid]:aid_ds1:[ctag]::::[pstf],[sstf];	
Restrictions: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. They default value is null. The NE SID code is the only other valid value.
aid_ds1	Access Identifier for the DS1 facility. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: NTT1-circuit – circuit: DS1 circuit on the NT (1)
[ctag]	Correlation tag (1...6 characters) that links an input command with associated output responses. The default is 0.
[pstf]	Primary state filter. Valid values are: IS: Matches IS-NR OOS: Out of service. Matches OOS-MA (out of service, management), OOS-AU (out of service, autonomous), OOS-AUMA (out of service, autonomous and management) AU: Autonomous. Matches OOS-AU, OOS-AUMA MA: Management. Matches OOS-MA, OOS-AUMA If no value is specified, this filter is ignored.
[sstf]	Secondary state filter. The value is: LPBK: Retrieve looped-back entities only If no value is specified, this filter is ignored.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-T1:[tid]:aid_ds1:[ctag]::::[pstf],[sstf] */
   aid_ds1::ds1_nblk:state[,sst]
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-T1:[tid]:aid_ds1:[ctag]::::[pstf],[sstf] */
   aid_ds1:ERRCDE=errcde
   /* error description */
;
```

Table 4-13. RTRV-T1 Response Parameters (1 of 2)

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
aid_ds1	As described for command parameters
ds1_nblk	Named parameter block for DS1 facility. The block consists of one or more of the following parameters, in any order separated by commas, each followed by an equal sign and a valid value. EQLZ: Line equalization (T1 short haul interfaces only). See Table 4-4, T1 Line Equalization Values. Default is 0. LBO: Line build-out in dB (T1 long haul interfaces only). Valid values are 0 (default), 7.5, 15, and 22.5. LINETYPE: Type of line interface used. Valid values are: – G703SHORT120: For E1 model. G.703 short-haul interface (120 ohm connector). – DSX1: For T1 model. T1 short-haul interface. – G703LONG: For E1 model. G.703 long-haul interface (120 ohm connector). Default for E1 models. – T1: T1 power loop. For T1 model. T1 long-haul interface. Default for T1 models. – G703SHORT75: For E1 model. G.703 short-haul interface (75 ohm connector).

Table 4-13. RTRV-T1 Response Parameters (2 of 2)

Parameter	Explanation
ds1_nblk *(continued)*	TMG: Timing supply – INT: Internal timing source. Use the NE system timing source (default). – LPD: Loop timing PORTID: Port identifier (32 characters maximum). Indicates the user to whom the port is assigned. The following values are reserved and cannot be used: – AVAILABLE: Port is not assigned. – FAULTY: Port has failed and cannot be assigned (default is null). QOSCLASS: Quality of service of connections on this port. The valid value is UBR (UBR connections only). The following parameters apply only if the DS1 facility directly transports ATM traffic (ATM mode). If no value is specified, null is assumed. ATMACCPROF: ATM Access Profile index (1). This value determines the range of values for vpi and vci in several other commands. The value cannot be changed while any VPLs or VCLs exist. ATMACCPROFNM: ATM Access Profile name. The default is NT DEFVAL. ATMACCPROF: ATM Access Profile index (1). This value determines the range of values for vpi and vci in several other commands. The value cannot be changed while any VPLs or VCLs exist. ATMACCPROFNM: ATM Access Profile name. The default is LT DEFVAL. QOSCLASS: Quality of service of connections on this port. The valid value is UBR (UBR connections only).
state	State from the Bellcore model. Values are: IS-NR. In service, normal. OOS-AU: Out of service, autonomous. OOS-MA: Out of service, management. Transient state (changes to OOS-AUMA). OOS-AUMA: Out of service, autonomous and management.
sst	Secondary state. Values are: LPBK: Retrieve looped-back entities only
errcde	Error code (see Appendix A, *Error Codes*)

Example

Retrieve configuration data for circuit 1 on the NT.

```
RTRV-T1:TAMPA:NTT1-1:42::::;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* RTRV-T1:TAMPA:NTT1-1:42::: */
   NTT1-1::LINETYPE=DSX1,LBO=0,EQLZ=0:IS-NR
;
```

Related Commands

ED-T1 on page 4-2

ENT-T1 on page 4-5

ATM Commands

5

Overview

This chapter contains the following other commands:

DLT-PROFILE-TRAFDSC

The DLT-PROFILE-TRAFDSC command deletes a selected ATM Traffic Descriptor profile that is not in use.

Table 5-1. DLT-PROFILE-TRAFDSC Command Parameters

DLT-PROFILE-TRAFDSC:[tid]:trafdsc_profile_id:[ctag][:];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
trafdsc_profile_id	Numeric identifier of a profile (1–250). Grouping and ranging are allowed.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* DLT-PROFILE-TRAFDSC:[tid]:trafdsc:[ctag][:] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* DLT-PROFILE-TRAFDSC:[tid]:trafdsc:[ctag][:] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 5-2. DLT-PROFILE-TRAFDSC Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Delete traffic descriptor profile 5.

```
DLT-PROFILE-TRAFDSC:TAMPA:5:42;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* DLT-PROFILE-TRAFDSC:TAMPA:5:42 */
;
```

Related Commands

ENT-PROFILE-TRAFDSC on page 5-8

RTRV-PROFILE-TRAFDSC on page 5-19

DLT-VCL

The DLT-VCL command deletes selected ATM interface Virtual Channel Links (VCL) that are not in use.

Table 5-3. DLT-VCL Command Parameters

DLT-VCL:[tid]:aid_vcl:[ctag][:];	
RESTRICTIONS: All parameters in this command are position-defined. If the VCL is cross-connected, the deletion fails.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_vcl	Virtual Circuit Identifier for the Virtual Circuit. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter any of in the following formats, replacing lower-case parameters with the values given: NTVCL-vpi-vci: VCL in the NT LTVCL-rack-shelf-slot-circuit-vpi-vci: VCL in an LT circuit – rack: Rack number (1) – shelf: Shelf number (1) – slot: LT slot number (1) – circuit: DSL circuit on the LT (1–4) – vpi: Virtual Path Identifier (for LT vpi=0, for NT vpi=0–15) – vci Virtual Channel Identifier (for LT vpi=32–63, for NT vpi=32–1023)
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* DLT-VCL:[tid]:aid_vcl:[ctag][:] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* DLT-VCL:[tid]:aid_vcl:[ctag][:] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 5-4. DLT-VCL Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Delete the VCL for Virtual Path 15.

```
DLT-VCL:TAMPA:NTVCL-15:42;
```

```
   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* DLT-VCL:TAMPA:NTVCL-15:42 */
;
```

Related Commands

ENT-VCL on page 5-10

RTRV-VCL on page 5-21

ED-ATMPORT

The ED-ATMPORT command edits configuration data associated with an ATM port in the NE.

Table 5-5. ED-ATMPORT Command Parameters

ED-ATMPORT:[tid]:aid_atmport:[ctag]:::[atmport_nblk];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_atmport	Access Identifier for an ATM port. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter any of in the following formats, replacing lower-case parameters with the values given: NTATM: ATM port in the NT LTATM-rack-shelf-slot-circuit: ATM port for an LT circuit – rack: Rack number (1) – shelf: Shelf number (1) – slot: LT slot number (1) – circuit: ADSL circuit on the LT (1–24)
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ED-ATMPORT:[tid]:aid_atmport:[ctag]:::[atmport_nblk]
*/
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* ED-ATMPORT:[tid]:aid_atmport:[ctag]:::[atmport_nblk]
*/
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 5-6. ED-ATMPORT Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
atmport_nblk	SEGID: ATM segment location ID. A 16-octet field that identifies this ATM interface for OAM F5 loopbacks. When a segment F5 OAM loopback cell is received, the destination segment location in the cell is compared to the segment location ID for the card. If the destination location ID matches the location ID or is all ones, the cell is looped back to the source. If there is not a match, the cell passes through the card. The value is entered as 32 hexadecimal characters or ALLONES (default). Allowed values are restricted per ITU-T1.610 as follows: ■ The first byte must be 01, 02, 03, FF or 6A. ■ If the first octet is FF, then octets 2–16 must also be FF. ■ If the first octet is 6A, then octets 2–16 must also be 6A. If no value is specified for this field, then this parameter remains the same.

Example

Edit rack 1, shelf 1, slot 1, circuit 9 to have an OAM segment location ID of all ones.

```
ED-ATMPORT:TAMPA:LTATM-1-1-1-9:42:::SEGID=ALLONES

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* ED-ATMPORT:TAMPA:LTATM-1-1-1-9:42:::SEGID=ALLONES */
;
```

Related Commands

RTRV-ATMPORT on page 5-13

ENT-PROFILE-TRAFDSC

The ENT-PROFILE-TRAFDSC command creates a new ATM Traffic Descriptor profile.

Table 5-7. ENT-PROFILE-TRAFDSC Command Parameters

ENT-PROFILE-TRAFDSC:[tid]:trafdsc_profile_id:[ctag]::profile_name,,trafdsc_type:[trafdsc_nblk];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
trafdsc_profile_id	Numeric identifier of a profile (1–250). Grouping and ranging are allowed.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
profile_name	Name (32 characters maximum) that uniquely identifies profile. The value cannot contain any characters other than letters, numbers, hyphens (-), and underscores (_).
trafdsc_type	Traffic descriptor type. The valid value is UBR (UBR best effort).
trafdsc_nblk	Named parameter block for the ATM traffic descriptor profile. The valid value is: DISCARD: Partial packet discard – Yes: Partial packet discard is enabled – No: Partial packet discard is disabled (default)

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /*
ENT-PROFILE-TRAFDSC:[tid]:trafdsc:[ctag]::trafdscnm,,trafdsc
_type:[trafdsc_nblk]; */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /*
ENT-PROFILE-TRAFDSC:[tid]:trafdsc:[ctag]::trafdscnm,,trafdsc
_type:[trafdsc_nblk]; */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 5-8. ENT-PROFILE-TRAFDSC Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Create a new with a profile identifier of 5, profile name of TAMPA101, descriptor type of UBR, and partial packet discard enabled.

```
ENT-PROFILE-TRAFDSC:TAMPA:5:42;
```

```
   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /*
ENT-PROFILE-TRAFDSC:TAMPA:5:42::TAMPA101,,UBR:DISCARD=YES */
;
```

Related Commands

DLT-PROFILE-TRAFDSC on page 5-2

RTRV-PROFILE-TRAFDSC on page 5-19

ENT-VCL

The ENT-VCL command creates an ATM interface Virtual Channel Links (VCL) on an NT or LT.

Table 5-9. ENT-VCL Command Parameters

ENT-VCL:[tid]:aid_vcl:[ctag]::[rcv_trafdsc],[xmt_trafdsc],[rcv_trafdscnm],[xmt_trafdscnm];	
RESTRICTIONS: All parameters in this command are position-defined. If the VCL or VPI is unavailable or in use, or the resources specified by the receive or transmit traffic descriptor are not available, the command fails.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_vcl	Virtual Circuit Identifier for the Virtual Circuit. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter any of in the following formats, replacing lower-case parameters with the values given: NTVCL-vpi-vci: VCL in the NT LTVCL-rack-shelf-slot-circuit-vpi-vci: VCL in an LT circuit – rack: Rack number (1) – shelf: Shelf number (1) – slot: LT slot number (1) – circuit: DSL circuit on the LT (1–24) – vpi: Virtual Path Identifier (for LT vpi=0, for NT vpi=0–15) – vci: Virtual Channel Identifier (for LT vpi=32–63, for NT vpi=32–1023)
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
[rcv_trafdsc][1]	Receive traffic descriptor profile index (1–250).
[rcv_trafdscnm][1]	Receive traffic descriptor profile name. If a local profile and network profile both match this name, the network profile is used.
[xmt_trafdsc][2]	Transmit traffic descriptor profile index (1–250).
[xmt_trafdscnm][2]	Transmit traffic descriptor profile name. If a local profile and network profile both match this name, the network profile is used.

[1] Either rcv_trafdsc or rcv_trafdscnm must be entered, but not both.

[2] Either xmt_trafdsc or xmt_trafdscnm must be entered, but not both.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /*
ENT-VCL:[tid]:aid_vcl:[ctag]::[rcv_trafdsc],[xmt_trafdsc],
[rcv_trafdscnm],[xmt_trafdscnm] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /*
ENT-VCL:[tid]:aid_vcl:[ctag]::[rcv_trafdsc],[xmt_trafdsc],
[rcv_trafdscnm],[xmt_trafdscnm]  */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 5-10. ENT-VCL Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Create a VCL for Virtual Path 15, Virtual Channel 207 with a Receive Traffic Descriptor of 13 and a Transmit Traffic Descriptor of 46

```
ENT-VCL:TAMPA:NTVCL-15-207:42::13,46;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* ENT-VCL:TAMPA:NTVCL-15-207:42::13,46 */
;
```

Related Commands

DLT-VCL on page 5-4

RTRV-VCL on page 5-21

RTRV-ATMPORT

The RTRV-ATMPORT command retrieves configuration data associated with an ATM port in the NE.

Table 5-11. RTRV-ATMPORT Command Parameters

RTRV-ATMPORT:[tid]:aid_atmport:[ctag]::::[pstf],[sstf];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_atmport	Access Identifier for an ATM port. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter any of in the following formats, replacing lower-case parameters with the values given: NTATM: ATM port in the NT LTATM-1-1-slot-circuit: ATM port for an LT circuit – slot: LT slot number (1) – circuit: ADSL circuit on the LT (1–24)
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
pstf	Primary State Filter. Valid values are: IS: In Service OOS: Out Of Service
sstf	Secondary State Filter. The only valid value is LPBK (loopback).

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-ATMPORT:[tid]:aid_atmport:[ctag]::::[pstf][sstf]
*/
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-ATMPORT:[tid]:aid_atmport:[ctag]::::[pstf][sstf]
*/
   errcde
;
```

Table 5-12. RTRV-ATMPORT Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_atmport	As described for command parameters (see Table 5-11, RTRV-ATMPORT Command Parameters).
state	State from the Bellcore model. Values are: IS-NR. In service, normal. OOS-AU: Out of service, autonomous. OOS-MA: Out of service, management. Transient state (changes to OOS-AUMA). OOS-AUMA: Out of service, autonomous and management.
sstf	As described for command parameters (see Table 5-11, RTRV-ATMPORT Command Parameters).
atmport_nblk	SEGID: ATM segment location ID. A 16-octet field that identifies this ATM interface for OAM F5 loopbacks. When a segment F5 OAM loopback cell is received, the destination segment location in the cell is compared to the segment location ID for the card. If the destination location ID matches the location ID or is all ones, the cell is looped back to the source. If there is not a match, the cell passes through the card. The value is entered as 32 hexadecimal characters or ALLONES (default). Allowed values are restricted per ITU-T1.610 as follows: ■ The first byte must be 01, 02, 03, FF or 6A. ■ If the first octet is FF, then octets 2–16 must also be FF. ■ If the first octet is 6A, then octets 2–16 must also be 6A. If no value is specified for this field, then this parameter remains the same.

Example

Retrieve parameters for in-service entities in the loopback state on the NTATM port.

```
RTRV-ATMPORT:TAMPA:NTATM:42::::IS_LPBK;
```

```
   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* RTRV-ATMPORT:TAMPA:NTATM:42::::IS_LPBK */
   NTATNM::SEGID="ALLONES":IS,LPBK
;
```

Related Commands

ED-ATMPORT on page 5-6

RTRV-PROFILE-ATMACC

The RTRV-PROFILE-ATMACC command retrieves configuration parameters of an ATM access profile.

Table 5-13. RTRV-PROFILE-ATMACC Command Parameters

RTRV-PROFILE-ATMACC:[tid]:atmacc_profile_id:[ctag]::, [profile_scope];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
atmacc_profile_id	Numeric Identifier for an ATM profile. The profile must not already be in use. Grouping is allowed and ALL may be used. Valid values are: 1: Default profile for LT line 2: Default profile for NT line
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
[profile_scope]	Scope of the profile. The valid value is LOCAL (local to this stack only). If no value is specified, this parameter is ignored (all values are specified).

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /*
RTRV-PROFILE-ATMCC:[tid]:atmacc_profile_id:[ctag][::,profile
_scope] */
atm_profile_id:profile_scope;profile_name:atmacc_nblk
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /*
RTRV-PROFILE-ATMACC:[tid]:atmacc_profile_id:[ctag][::,profil
e_scope] */
   errcde
;
```

Table 5-14. RTRV-ATMACC Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
atmacc_profile_id	As described for command parameters (see Table 5-13, RTRV-PROFILE-ATMACC Command Parameters), except ALL is not used.
profile_scope	As described for command parameters (see Table 5-13, RTRV-PROFILE-ATMACC Command Parameters).
profile_name	A string of characters (32 maximum) that uniquely identifies the profile within its scope. Default for LT=1. Default for NT=2.
atmacc_nblk	ATM access profile parameter block containing one or more of the following named parameters (separated by commas): MAXPCS: Maximum number of virtual path circuits supported. Values are: – NT: 0 – LT: 0 MAXVCCS: Maximum number of virtual channel circuits supported. Maximum values are: – NT: 97 – LT: 4 VPIBITS: Number of active VPI bits (0–10). Default values are: – NT: 4 – LT: 1 VCIBITS: Number of active VCI bits (0–10). Default values are: – NT: 10 – LT: 6
errcde	Error code (see Appendix A, *Error Codes*).

Example

Retrieve parameters for profile 6.

```
RTRV-PROFILE-ATMACC:TAMPA:6:42::,LOCAL;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* RTRV-PROFILE-ATMACC:TAMPA:6:42::,LOCAL */
   6:LOCAL:TAMPA101:MAXVPCS=0,MAXVCCS=4,VPIBITS=1,VCIBITS=6
;
```

Related Commands

None

RTRV-PROFILE-TRAFDSC

The RTRV-PROFILE-TRAFDSC command retrieves configuration parameters of an ATM traffic descriptor file.

Table 5-15. RTRV-PROFILE-TRAFSDSC Command Parameters

RTRV-PROFILE-TRAFDSC:[tid]:trafdsc_profile_id:[ctag]::,[profile_scope];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
trafdsc_profile_id	Numeric Identifier for a traffic descriptor profile (1–250). Grouping and ranging are allowed and ALL may be used.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
[profile_scope]	Scope of the profile. The valid value is LOCAL (local to this unit only). If no value is specified, this parameter is ignored (all values are specified).

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /*
RTRV-PROFILE-TRAFDSC:[tid]:trafdsc:[ctag]::,[profile_scope]
*/
trafdsc:profile_name:profile_scope:trafdscr_type:trafdscr_
nblk
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /*
RTRV-PROFILE-TRAFDSC:[tid]:trafdsc:[ctag]::,[profile_scope]
*/
   errcde
;
```

Table 5-16. RTRV-PROFILE-TRAFDSC Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
trafdsc	As described for command parameters (see Table 5-15, RTRV-PROFILE-TRAFSDSC Command Parameters), except ALL is not used.
profile_scope	As described for command parameters (see Table 5-15, RTRV-PROFILE-TRAFSDSC Command Parameters).
profile_name	A string of characters (32 maximum) that uniquely identifies the profile within its scope.
trafdscr_type	Traffic descriptor type. The valid value is UBR (best effort).
trafdsc_nblk	ATM traffic descriptor profile parameter block, containing the following parameter: DISCARD: Packet discard. Valid values are: – Yes: Partial packet discard is enabled. – No: Partial Packet discard is disabled.
errcde	Error code (see Appendix A, *Error Codes*).

Example

Retrieve parameters for profile 6.

```
RTRV-PROFILE-TRAFDSC:TAMPA:6:42::;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* RTRV-PROFILE-TRAFDSC:TAMPA:6:42:: */
   6:TAMPA101,LOCAL,UBR,DISCARD=YES
;
```

Related Commands

DLT-PROFILE-TRAFDSC on page 5-2

ENT-PROFILE-TRAFDSC on page 5-8

RTRV-VCL

The RTRV-VCL command retrieves configuration data associated with an ATM virtual channel link.

Table 5-17. RTRV-VCL Command Parameters

RTRV-VCL:[tid]:aid_vci:[ctag]::::[pstf],[sstf];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_vci	Virtual Circuit Identifier for the Virtual Circuit. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter any of in the following formats, replacing lower-case parameters with the values given: NTVCL-vpi-vci: VCL in the NT LTVCL-rack-shelf-slot-circuit-vpi-vci: VCL in an LT circuit – rack: Rack number (1) – shelf: Shelf number (1) – slot: LT slot number (1) – circuit: DSL circuit on the LT (1–24) – vpi: Virtual Path Identifier (for LT vpi=0, for NT vpi=0–15) – vci Virtual Channel Identifier (for LT vpi=32–63, for NT vpi=32–1023)
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
pstf	Primary State Filter. If no value is specified, this filter is ignored. Valid values are: IS: In Service OOS: Out Of Service
sstf	Secondary State Filter. The only valid value is LPBK (loopback).

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-VCL:[tid]:aid_vci:[ctag]::::[pstf][sstf] */
aid_vcl:rcv_trafdsc,xmt_trafdsc,rcv_trafdscnm,xmt_trafdscnm:
state
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-VCL:[tid]:aid_vci:[ctag]::::[pstf][sstf] */
   errcde
;
```

Table 5-18. RTRV-VCL Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_vci	As described for command parameters (see Table 5-17, RTRV-VCL Command Parameters).
rcv_trafdsc	Receive traffic descriptor profile index (1–250).
xmt_trafdsc	Transmit traffic descriptor profile index (1–250).
sstf	As described for command parameters. The only valid value is LBPBK (loopback).

Example

Retrieve VCL for virtual path 15, virtual channel 307.

```
RTRV-VCL:TAMPA:NTVCL-15-307:42;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* RTRV-VCL:TAMPA:NTVCL-15-307:42 */
   NTVCL-15-307:78,66:IS_NR
;
```

Related Commands

ED-ATMPORT on page 5-6

Cross Connect Commands

6

Overview

This chapter contains the following CrossConnect commands:

Cross-Connection Defaults

The default uplink cross connections start with VPI = 2, VCI = 32 for Port 1 and increments one VCI for each subsequent port. For example, Port 2 cross connection is VPI = 2, VCI = 33, and Port 3 cross connection is VPI = 2, VCI = 34, and so on. The default uplink for inband management for the ATM-1 interface is VPI = 0, VCI = 33, and for the ATM-2 interface is VPI = 0, VCI = 33.

DLT-CRS-VC

The DLT-CRS-VC command deletes selected VC-level cross-connections between the NT and LT.

Table 6-1. DLT-CRS-VC Command Parameters

DLT-CRS-VC:[tid]:nt_vcl,lt_vcl:[ctag];	
RESTRICTIONS: All parameters in this command are position-defined. This command requires two AID parameter entries to uniquely identify an existing cross-connection. A cross-connection must be place out of service before it can be deleted. A partial (PRTL) response is generated if all cross-connections cannot be deleted. The range of values for vpi and vci is determined by the number of VPI and VCI bits allocated.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
nt_vcl	Virtual Channel Identifier for the Virtual Channel Link on the NT (network) side. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: NTVCL-vpi-vci vpi: Virtual Path Identifier vci: Virtual Channel Identifier for the Virtual Channel Link
lt_vcl	Virtual Channel Identifier for the Virtual Channel Link on the LT (user) side. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: LTVCL-rack-shelf-slot-circuit-vpi-vci: ADSL interface – rack: Rack number (1) – shelf: Shelf number (1) – slot: LT slot number (1) – circuit: ADSL circuit on the LT (1–4) – vpi: Virtual Path Identifier (for LT vpi=0, for NT vpi=0–15) – vci: Virtual Channel Identifier for the virtual channel link (for LT vpi=32–63, for NT vpi=32–1023)
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* DLT-CRS-VC:[tid]:nt_vcl,lt_vcl:[ctag] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* DLT-CRS-VC:[tid]:nt_vcl,lt_vcl:[ctag] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 6-2. DLT-CRS-VC Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Delete VC-level cross-connection between Virtual Path 14, Virtual Channel 307 (network side) and Rack 1, Shelf 1, LT Slot 1, Circuit 4, Virtual Path 0, Virtual Channel 63 (user side).

```
DLT-CRS-VC:TAMPA:NTVCL-14-307,LTVCL-1-1-1-4-0-63:42;
```

```
   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* DLT-CRS-VC:TAMPA:NTVCL-14-307,LTVCL-1-1-1-4-0-63:42
*/
;
```

Related Commands

ED-CRS-VC on page 6-4

ENT-CRS-VC on page 6-7

RTRV-CRS-VC on page 6-10

ED-CRS-VC

The ED-CRS-VC command edits the configuration of a VC-level cross-connection between the NT and an LT.

Table 6-3. ED-CRS-VC Command Parameters

ED-CRS-VC:[tid]:nt_vcl,lt_vcl:[ctag]::::[pst];	
RESTRICTIONS: The following restrictions apply to this command: ■ All parameters in this command are position-defined. ■ This command requires two AID parameter entries to uniquely identify an existing cross-connection. ■ The deletion of a cross-connection is conditional on its current operational state. All endpoints must be edited OOS-MA-AS or the command will fail. ■ A partial (PRTL) response is generated if all cross-connections cannot be deleted. ■ The range of values for vpi and vci is determined by the number of VPI and VCI bits allocated.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
nt_vcl	Virtual Channel Identifier for the Virtual Channel Link on the NT (network) side. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: NTVCL-vpi-vci – vpi: Virtual Path Identifier – vci: Virtual Channel Identifier for the Virtual Channel Link
lt_vcl	Virtual Channel Identifier for the Virtual Channel Link on the LT (user) side. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: LTVCL-rack-shelf-slot-circuit-vpi-vci: LT circuit – rack: Rack number (1) – shelf: Shelf number (1) – slot: LT slot number (1) – circuit: ADSL circuit on the LT (1–4) – vpi: Virtual Path Identifier (for LT vpi=0, for NT vpi=0–15) – vci: Virtual Channel Identifier for the Virtual Channel Link (for LT vpi=32–63, for NT vpi=32–1023)
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
[pst]	Desired Primary State. Valid values are: IS: In-Service OOS: Out-Of-Service (OOS-MA is implied) If not specified, the value of this parameter remains unchanged.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ED-CRS-VC:[tid]:nt_vcl,lt_vcl:[ctag]::::[pst] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* ED-CRS-VC:[tid]:nt_vcl,lt_vcl:[ctag]::::[pst] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 6-4. ED-CRS-VC Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Edit VC-level cross-connection between Virtual Path 14, Virtual Channel 307 (network side) and Rack 1, Shelf 1, LT Slot 1, Circuit 4, Virtual Path 0, Virtual Channel 63 (user side) to be In-Service.

```
ED-CRS-VC:TAMPA:NTVCL-14-307,LTVCL-1-1-1-4-0-63:42::IS;
```

```
   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* ED-CRS-VC:TAMPA:NTVCL-14-307,LTVCL-1-1-1-4-0-63
:42::IS */
;
```

Related Commands

DLT-CRS-VC on page 6-2

ENT-CRS-VC on page 6-7

RTRV-CRS-VC on page 6-10

ENT-CRS-VC

The ENT-CRS-VC command establishes a VC-level cross-connection between the NT and LT.

Table 6-5. ENT-CRS-VC Command Parameters

ENT-CRS-VC:[tid]:nt_vcl,lt_vcl:[ctag]::::[pst];	
RESTRICTIONS: All parameters in this command are position-defined. The range of values for vpi and vci is determined by the number of VPI and VCI bits allocated. View the number of bits allocated with the **RTRV-PROFILE-ATMACC** command.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
nt_vcl	Virtual Channel Identifier for the Virtual Channel Link on the NT (network) side. Enter in the following format, replacing lower-case parameters with the values given: NTVCL-vpi-vci – vpi: Virtual Path Identifier (for LT vpi=0, for NT vpi=0–15) – vci: Virtual Channel Identifier for the Virtual Channel Link (for LT vpi=32–63, for NT vpi=32–1023) Grouping is allowed for up to 8 AIDs. Ranging is allowed.
lt_vcl	Virtual Channel Identifier for the Virtual Channel Link on the LT (user) side. Enter in the following format, replacing lower-case parameters with the values given: LTVCL-rack-shelf-slot-circuit-vpi-vci: Virtual Channel in the NT – rack: Rack number (1) – shelf: Shelf number (1) – slot: LT slot number (1) – circuit: ADSL circuit on the LT (1–24) – vpi: Virtual Path Identifier (for LT vpi=0, for NT vpi=0–15) – vci: Virtual Channel Identifier (for LT vpi=32–63, for NT vpi=32–1023) Grouping and ranging are allowed. If these features are used, the two sets of AIDs must match one-to-one.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
[pst]	Desired Primary State. Valid values are: IS: In-Service (default) OOS: Out-Of-Service (OOS-MA is implied) If no value is specified, IS is assumed.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ENT-CRS-VC:[tid]:nt_vcl,lt_vcl:[ctag]::::[pst] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* ENT-CRS-VC:[tid]:nt_vcl,lt_vcl:[ctag]::::{pst] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 6-6. ENT-CRS-VC Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Establish a VC-level cross-connection between Virtual Path 14, Virtual Channel 307 (network side) and Rack 1, Shelf 1, LT Slot 1, Circuit 4, Virtual Path 0, Virtual Channel 63 (user side), and set the primary state to In-Service.

```
ENT-CRS-VC:TAMPA:NTVCL-14-307,LTVCL-1-1-1-4-0-63:42::::IS;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /*
ENT-CRS-VC:TAMPA:NTVCL-14-307,LTVCL-1-1-1-4-0-63:42::::IS */
;
```

Related Commands

DLT-CRS-VC on page 6-2

ED-CRS-VC on page 6-4

RTRV-CRS-VC on page 6-10

RTRV-CRS-VC

The RTRV-CRS-VC command retrieves the configuration of an ATM Interface Virtual Channel cross-connection.

Table 6-7. RTRV-CRS-VC Command Parameters

RTRV-CRS-VC:[tid]:aid_vci:[ctag]::::[pstf];	
RESTRICTIONS: All parameters in this command are position-defined. The range of values for vpi and vci is determined by the number of VPI and VCI bits allocated.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_vcl	Virtual Channel Identifier for the Virtual Circuit. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter in the following formats, replacing lower-case parameters with the values given: NTVCL-vpi-vci: VCL in the NT LTVCL-rack-shelf-_slot-circuit-vpi-vci: VCL in an LT circuit – rack: Rack number (1) – shelf: Shelf number (1) – lt_slot: LT slot number (1) – circuit: ADSL circuit on the LT (1–24) – vpi: Virtual Path Identifier – vci: Virtual Channel Identifier
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
[pstf]	Selects a range of states from the Bellcore state model. Valid values are: IS: Matches IS-NR OOS: Matches OOS-MA, OOS-AU, OOS-AUMA AU: Matches OOS-AU, OOS-AUMA MA: Matches OOS-MA, OOS-AUMA Grouping and ranging are allowed. If no value is specified, ALL is assumed.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-CRS-VC:[tid]:aid_vcl:[ctag]::::[pstf] */
   nt_vci,lt_vci:::state
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-CRS-VC:[tid]:aid_vci:[ctag]::::[pstf] */
   errcde
;
```

Table 6-8. RTRV-CRS-VC Response Parameters (1 of 2)

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
nt_vci	Virtual Channel Identifier for the Virtual Channel Link on the NT (network) side. Values are: NTVCL-vpi-vci – vpi: Virtual Path Identifier – vci: Virtual Channel Identifier for the Virtual Channel Link

Table 6-8. RTRV-CRS-VC Response Parameters (2 of 2)

Parameter	Explanation
lt_vci	Virtual Channel Identifier for the Virtual Channel Link on the LT (user) side. Values are: LTVCL-rack-shelf-slot-circuit-vpi-vci – rack: Rack Number (1) – shelf: Shelf Number (1) – slot: LT Slot Number (1) – circuit: ADSL circuit on the LT (1–24) – vpi: Virtual Path Identifier (for LT vpi=0, for NT vpi=0–15) – vci: Virtual Channel Identifier (for LT vpi=32–63, for NT vpi=32–1023)
state	State of the cross-connection. Values are IS-NR, OOS-AU, OOS-MA (transient state, changes to OOS-MA) OOS-AUMA, OOS-MAANR

Example

Retrieve configuration for the In-Service VC-level cross-connection involving Virtual Path 14, Virtual Channel 307.

```
RTRV-CRS-VC:TAMPA:NTVCL-14-307:42::::IS;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* RTRV-CRS-VC:TAMPA:NTVCL-14-307:42::::IS */
   NTVCL-14-307,LTVCL-1-1-1-4-37-1023:::IS-NR
;
```

Related Commands

DLT-CRS-VC on page 6-2

ED-CRS-VC on page 6-4

ENT-CRS-VC on page 6-7

Equipment Commands

7

Overview

This chapter contains the following Equipment commands:

ED-EQPT

The ED-EQPT command edits configuration data associated with equipment supported by the system.

Table 7-1. ED-EQPT Command Parameters

ED-EQPT:[tid]:aid_eqpts:[ctag]::[eqpt_nblk]:[pst];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_eqpts	Access identifier of an equipment unit. The value can be preceded with AID=, but this is not required. Enter in one of the following formats, replacing lower-case parameters with the values given: LT-rack-shelf-slot LTA (Line Termination Unit A)-rack-shelf-slot – rack: Rack number (1) – shelf: Shelf number (1) – slot: LT slot number (1) Grouping and ranging are allowed.
[ctag]	Correlation tag (1–6 characters) that links an input command with associated output responses. The default is 0.
[eqpt_nblk]	Named parameter block for equipment. Consists of the following parameter name followed by an equal sign and a valid value: – SWVER: Version of software that is configured (1–32 characters). Input is case-sensitive. If not specified, the value of this parameter remains unchanged. The system resets whenever the software version is changed.
[pst]	Desired Primary State (LT or ACU only). Valid value is IS (In-Service). If not specified, the value of this parameter remains unchanged.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ED-EQPT:[tid]:aid_eqpts:[ctag]::[eqpt_nblk]:[pst] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* ED-EQPT:[tid]:aid_eqpts:[ctag]::[eqpt_nblk]:[pst] */
aid:ERRCDE=errcde
   /* error description */
;
```

Table 7-2. ED-EQPT Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Edit ACU unit in rack 1, shelf 1 to be In-Service.

```
ED-EQPT:TAMPA:ACU-1-1:42::::IS;
```

```
   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* ED-EQPT:TAMPA:ACU-1-1:42::::IS */
;
```

Related Commands

RTRV-EQPT on page 7-6

REPT ALM EQPT

The REPT ALM EQPT message reports current alarms from the NE.

Table 7-3. REPT ALM EQPT Message Parameters

almcde atag REPT ALM EQPT aid_eqpts:ntfcde,cond_eqpt, srveff,[ocrdat],[ocrtm]: [conddescr];	
almcde	Alarm code. Identifies the severity of the alarm. Values are: – *C: Critical alarm – **: Major alarm – *^: Minor alarm – A^: Automatic message (typically reports a cleared alarm)
atag	Automatic tag. Indicates the numerical sequence of reported messages.
aid_eqpts	Access identifier for the equipment. Each AID format can be preceded with AID=, but this is not required. Enter in the following format, replacing lower-case parameters with the values given: – LT-rack-shelf-slot: LT unit – SHELF-rack-shelf: shelf – rack: Rack Number (1) – shelf: Shelf Number (1) – slot: LT Slot Number (1)
[ntfncde]	Notification code. Valid values are: – CR: Critical alarm – MJ: Major alarm – MN: Minor alarm – CL: Cleared alarm
cond_eqpt	Equipment condition. Valid values are: – EQPT: Equipment failed self-test – FANALM-1: Fan alarm for fan 1 – FANALM-2: Fan alarm for fan 2 – PROGVER: Failed to load or find requested software – RMTDLFAIL: Failed to download software – SWROLLBACK: Software version rolled back
[serveff]	Service effect. Valid values are: – SA: Service affecting – NSA: Not service affecting
[ocrdat]	Date of alarm occurrence in the format mm-dd (month-day).
[ocrtm]	Time of alarm occurrence in the format hh-mm (hour-minute).
[conddescr]	Description of alarm condition (40 characters maximum).

REPT EVT EQPT

The REPT EVT EQPT message reports current equipment events from the NE.

Table 7-4. REPT EVT EQPT Message Parameters

almcde atag REPT EVT EQPTaid_eqpt:cond_eqpt,[condeff], [ocrdat],[ocrtm]:[conddescr];	
almcde	Alarm code. Identifies the severity of the alarm. Values are: – *C: Critical alarm – **: Major alarm – *^: Minor alarm – A^: Automatic message (typically reports a cleared alarm)
atag	Automatic tag. Indicates the numerical sequence of reported messages.
aid_eqpt	Access identifier for the equipment. Each AID format can be preceded with AID=, but this is not required. Enter in the following format, replacing lower-case parameters with the values given: – LT-rack-shelf-slot: LT unit – SHELF-rack-shelf: shelf – rack: Rack Number (1) – shelf: Shelf Number (1) – slot: LT Slot Number (1)
cond_eqpt	Equipment condition. Valid values are: – EQPT: Equipment failed self-test – FANALM-1: Fan alarm for fan 1 – FANALM-2: Fan alarm for fan 2 – PROGVER: Failed to load or find requested software or configuration file – RMTDLFAIL: Failed to download software or configuration – SWROLLBACK: Software version rolled back
[condeff]	Effect of the event on the condition reported. Valid values are: – SC: Standing condition raised – CL: Standing condition cleared
[ocrdat]	Date of alarm occurrence in the format mm-dd (month-day).
[ocrtm]	Time of alarm occurrence in the format hh-mm (hour-minute).
[conddescr]	Description of alarm condition (40 characters maximum).

RTRV-EQPT

The RTRV-EQPT command retrieves configuration data associated with a unit of equipment.

Table 7-5. RTRV-EQPT Command Parameters

RTRV-EQPT:[tid]:aid_eqpts:[ctag][:];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_eqpts	Access identifier of an equipment unit. The value can be preceded with AID=, but this is not required. Enter in one of the following formats, replacing lower-case parameters with the values given: – NT: All Network Termination units – NTA Network Termination unit A – LT-rack-shelf-slot: All LT units in a rack-shelf-slot – rack: Rack number (1) – shelf: Shelf number (1) – slot: LT slot number (1) – LTA-rack-shelf-slot: Line Termination unit A (on main card) – LPCO-rack-shelf-slot: Low-Pass Filter-Central Office (in expansion slot Grouping is allowed. ALL may be used.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-EQPT:[tid]:aid_eqpts:[ctag] */
   aid_eqpts:[eqpt_type],[cur_eqpt]:[eqpt_nblk]:state,[sst]

;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-EQPT:[tid]:aid_eqpts:[ctag] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 7-6. RTRV-EQPT Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year (two digits), month, and day
hh:mm:ss	Hour (00-23), minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_eqpts	As described for command parameters (see Table 7-5, RTRV-EQPT Command Parameters), except that ALL, NT, and LT are not used
[eqpt_type]	Type of equipment being installed (1– 8 characters). Values are: – ADLT-A: 24-port ADSL (RV3) Line Termination card (main card) – ALTS-A: ADSL Line Termination shelf – ATUR-EP: ADSL endpoint [used for RTRV-INV-EQPT] – D1NT-A: DS1 Network Termination card – LPCO-A: 24-port Low Pass Central Office card – NONE: No equipment may be installed in this slot If eqpt_type is not shown, the slot has not been configured.
[cur_eqpt]	Type of the equipment actually installed (8 characters maximum). If the equipment is not installed, no value is displayed.
[eqpt_nblk]	Named parameter block for equipment. The block consists of one or more of the following parameters, in any order separated by commas, each followed by an equal sign and a valid value: – SWVER: Version of configured software (32 characters maximum). – CURSWVER: Version of software actually installed (32 characters maximum). If the equipment is not installed or no software is available, no value is displayed. – DSPSWVER: The ADSL port DSP revision is displayed for the LT.
state	State from the Bellcore state model. Values are: IS-NR, OOS-AU, OOS-MA (transitory state, changes to OOS-AUMA), OOS-AUMA.
[sst]	Secondary state of the equipment. Valid values are: AINS, FLT, PPS, PWR, RAR, TS, UEQ.

Example

Retrieve configuration data associated with Shelf 1.

```
RTRV-EQPT:TAMPA:SHELF-1-1:42;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   SHELF-1-1:NONE:NONE:,,:IS-NR,
  /* RTRV-EQPT:TAMPA:SHELF-1-1:42 */
;
```

Related Commands

ED-EQPT on page 7-2

RTRV-INV-EQPT

The RTRV-INV-EQPT command retrieves inventory data associated with a unit of equipment.

Table 7-7. RTRV-INV-EQPT Command Parameters

RTRV-INV-EQPT:[tid]:aid_eqps:[ctag];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_eqpts	Access identifier of an equipment unit. The value can be preceded with AID=, but this is not required. Enter in one of the following formats, replacing lower-case parameters with the values given: NT: All Network Termination units NTA Network Termination unit A LT-rack-shelf-slot: All LT units in a shelf-slot rack: Rack number (1) shelf: Shelf number (1) slot: LT slot number (1) ATUR-rack-shelf-slot-circuit: ADSL endpoint attached to LT-rack-shelf-circuit LTA-rack-shelf-slot: Line Termination unit A (on main card) LPCO-rack-shelf-slot: Low-Pass Filter-Central Office (in expansion slot) SHELF-rack-shelf: General shelf and chassis-level information Grouping is allowed. ALL may be used.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-INV-EQPT:[tid]:aid_eqpt:[ctag] */
   aid_eqpt:cur_eqpt,manuf,partno,[rev],[serno],clei
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-INV-EQPT:[tid]:aid_eqpts:[ctag] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 7-8. RTRV-INV-EQPT Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year (two digits), month, and day
hh:mm:ss	Hour (00-23), minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_eqpt	As described for command parameters (see Table 7-7, RTRV-INV-EQPT Command Parameters), except that NT and LT are not used.
cur_eqpt	Type of the equipment actually installed (8 characters maximum). If the equipment is not installed, no value is displayed.
manuf	Manufacturer (Paradyne).
partno	Unit's part number.
rev	Numeric Item Change Status (ICS) value indicating the revision level of the unit.
serno	Serial number of the unit.
clei	Common Language Equipment Identifier (CLEI) code of the unit (from entPhysicalAssetID MIB).

Example

Retrieve inventory for Shelf 1.

```
RTRV-INV-EQPT:TAMPA:SHELF-1-1:42::;
```

```
   TAMPA 02-08-06 12:30:43
M  42 COMPLD
   SHELF-1-1:ALTS-A,PARADYNE,,,,,
   /* RTRV-INV-EQPT:TAMPA:SHELF-1-1:42 */
;
```

Related Commands

None

IP Access Commands

8

Overview

This chapter contains the following IP Access commands:

DLT-ATMARPENT

The command DLT-ATMARPENT deletes entries in the ATM Address Resolution Protocol table.

Table 8-1. DLT-ATMARPENT Command Parameters

DLT-ATMARPENT:[tid]:aid_ipport:[ctag]::ip_addr;	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_ipport	Access identifier of the IP port to be deleted. The value can be preceded with AID=, but this is not required. The valid values are: ATM-1: First IP-over-ATM interface in the NT ATM-2: Second IP-over-ATM interface in the NT Grouping is allowed and ALL may be used.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
ip_addr	The IP address associated with the port. Valid values are: ddd.ddd.ddd.ddd (where ddd is 1–255). ALL may be used.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* DLT-ATMARPENT:[tid]:aid_ipport:[ctag]::ip_addr */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY;
   /* DLT-ATMARPENT:[tid]:aid_ipport:[ctag]::ip_addr */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 8-2. DLT-ATMARPENT Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Delete the entry for ATM-2 port with IP address 123.201.143.71.

```
DLT-ATMARPENT:TAMPA:ATM-2:42::123.201.143.71;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* DLT-ATMARPENT:TAMPA:ATM-2:42::123.201.143.71 */
;
```

Related Commands

ENT-IPPORT on page 8-11

ED-IPPORT on page 8-6

ENT-ATMARPENT on page 8-9

RTRV-IPPORT on page 8-19

RTRV-ATMARPENT on page 8-17

DLT-IPPORT

The command DLT-IPPORT deletes an Internet Protocol port (or interface) in the NE. All entries in the ATM Address Resolution Protocol table for a IP port must be deleted (**DLT-ATMARPENT** on page 8-2) before the port can be deleted.

Table 8-3. DLT-IPPORT Command Parameters

DLT-IPPORT:[tid]:aid_ipport:[ctag][;];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_ipport	Access identifier of the IP port to be entered. The value can be preceded with AID=, but this is not required. The valid values are: ATM-1: First IP-over-ATM interface in the NT ATM-2: Second IP-over-ATM interface in the NT ETH-1: First Ethernet interface in the NT Grouping is allowed and ALL may be used.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* DLT-IPPORT:[tid]:aid_ipport:[ctag][:]: */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY;
   /* DLT-IPPORT:[tid]:aid_ipport:[ctag][:]: */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 8-4. DLT-IPPORT Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Delete ATM-2 port.

```
DLT-IPPORT:TAMPA:ATM-2:42;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* DLT-IPPORT:TAMPA:ATM-2:42 */
;
```

Related Commands

DLT-ATMARPENT on page 8-2

ENT-IPPORT on page 8-11

ED-IPPORT on page 8-6

ENT-ATMARPENT on page 8-9

RTRV-IPPORT on page 8-19

ED-IPPORT

The command ED-IPPORT edits configuration data associated with an Internet Protocol port (or interface) in the NE.

Table 8-5. ED-IPPORT Command Parameters (1 of 2)

ED-IPPORT:[tid]:aid_ipport:[ctag]::cfg_mode:ipport_nblk [pst];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_ipport	Access identifier of the IP port to be entered. The value can be preceded with AID=, but this is not required. The valid values are: ATM-1: First IP-over-ATM interface in the NT ATM-2: Second IP-over-ATM interface in the NT ETH-1: First Ethernet interface in the NT
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
cfg_mode	Configuration mode for the IP port. Valid values are: MANUAL: Port parameters are configured by the operator. BOOTP: Port parameters are configured using the BOOTP protocol.
ipport_nblk	Named parameter block for IP Port. The block consists of one or more of the following parameters, in any order separated by commas, each followed by an equal sign and a valid value. IPADDR: IP address associated with the port. Required if cfg_mode=MANUAL. Auto-configured if cfg_mode=BOOTP. Valid values are: – ddd.ddd.ddd.ddd (where ddd is a number 1–255). NETMASK: IP address network mask. Required if cfg_mode=MANUAL. Auto-configured if cfg_mode=BOOTP. Valid values are: – ddd.ddd.ddd.ddd (where ddd is a number 1–255). All values are valid for ETH-1. For ATM-1 and ATM-2, the value must be 255.255.255.255. GATEWAY: IP address of the default IP router (gateway) for this IP interface. Valid values are: – ddd.ddd.ddd.ddd (where ddd is a number 1–255) for ETH-1 only. – NONE: No gateway PHYADDR: Physical address associated with the port. Used by BOOTP on ETH-1. Valid values are: – xx-xx-xx-xx-xx-xx-xx-xx where each x is a hexadecimal digit (0–F). This must be the MAC address originally assigned to the unit if aid_port is ETH-1.

Table 8-5. ED-IPPORT Command Parameters (2 of 2)

ED-IPPORT:[tid]:aid_ipport:[ctag]::cfg_mode:ipport_nblk [pst];	
[pst]	Desired primary state. Valid values are: IS: In Service (default) OOS: Out Of Service (OOS-MA is implied) If no value is specified, this parameter remains unchanged.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ED-IPPORT:[tid]:aid_ipport:[ctag]::cfg_mode:
ipport_nblk */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY;
   /* ED-IPPORT:[tid]:aid_ipport:[ctag]::cfg_mode:
ipport_nblk */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 8-6. ED-IPPORT Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Configure the SLIP port with a configuration mode of BOOTP and a physical address of 18-00-42-49-09-03-27-22.

```
ED-IPPORT:TAMPA:SLIP:42::BOOTP:PHYADDR="18-00-42-49-09-03-27
-22";

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /*
ED-IPPORT:TAMPA:SLIP:42::BOOTP:PHYADDR="18-00-42-49-09-03-27
-22" */
;
```

Related Commands

DLT-ATMARPENT on page 8-2

ENT-ATMARPENT on page 8-9

ENT-IPPORT on page 8-11

RTRV-IPPORT on page 8-19

ENT-ATMARPENT

The command ENT-ATMARPENT defines a new entry in the ATM Address Resolution Protocol table in the NE.

Table 8-7. ENT-ATMARPENT Command Parameters

ENT-ATMARPENT:[tid]:aid_ipport:[ctag];;ip_addr,[vpi],[vci] [arpent_nblk];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_ipport	Access identifier of the IP port to be deleted. The value can be preceded with AID=, but this is not required. The valid values are: ATM-1: First IP-over-ATM interface in the NT ATM-2: Second IP-over-ATM interface in the NT
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
ip_addr	The next-hop IP address associated with the port. Valid values are: ddd.ddd.ddd.ddd (where ddd is 1–255).
[vpi]	The ATM Virtual Path Identifier (0–15) associated with the virtual circuit for the entry. If no value is specified, BOOTVPI is used on ATM-1. Required for ATM-2. See **SET-NE-ALL** on page 14-31 for more information.
[vci]	The ATM Virtual Channel Identifier (32–1023) associated with the virtual circuit for the entry. If no value is specified, BOOTVCI is used on ATM-1. Required for ATM-2. See **SET-NE-ALL** on page 14-31 for more information.
[arpent_nblk]	The named parameter block for the ARP table. The block consists of the following parameter followed by an equal sign (=) and a valid value: BITRATE: Bandwidth associated with the ATM VC for the entry. The valid value is 0 (UBR).

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /*
ENT-ATMARPENT:[tid]:aid_ipport:[ctag]::ip_addr,[vpi][vci] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY;
   /*
ENT-ATMARPENT:[tid]:aid_ipport:[ctag]::ip_addr,[vpi],[vci]
*/
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 8-8. ENT-ATMARPENT Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Define a new entry for ATM-2 port with IP address 123.201.143.71.

```
ENT-ATMARPENT:TAMPA:ATM-1:42::123.201.143.71;
```

```
   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* ENT-ATMARPENT:TAMPA:ATM-2:42::123.201.143.71 */
;
```

Related Commands

DLT-ATMARPENT on page 8-2

ENT-IPPORT on page 8-11

ED-IPPORT on page 8-6

RTRV-IPPORT on page 8-19

RTRV-ATMARPENT on page 8-17

ENT-IPPORT

The command ENT-IPPORT configures an Internet Protocol port (or interface) in the NE.

Table 8-9. ENT-IPPORT Command Parameters

ENT-IPPORT:[tid]:aid_ipport:[ctag]::cfg_mode:ipport_nblk;	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_ipport	Access identifier of the IP port to be entered. The value can be preceded with AID=, but this is not required. The valid values are: ATM-1: First IP-over-ATM interface in the NT ATM-2: Second IP-over-ATM interface in the NT ETH-1: First Ethernet interface in the NT
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
cfg_mode	Configuration mode for the IP port. Valid values are: MANUAL: Port parameters are configured by the operator. BOOTP: Port parameters are configured using the BOOTP or DHCP protocol (default).
ipport_nblk	Named parameter block for IP Port. The block consists of one or more of the following parameters, in any order separated by commas, each followed by an equal sign and a valid value. IPADDR: IP address associated with the port. Required if cfg_mode=MANUAL. Auto-configured if cfg_mode=BOOTP. Valid values are: – ddd.ddd.ddd.ddd (where ddd is a number 1–255). NETMASK: IP address network mask. Used if cfg_mode=MANUAL. Auto-configured if cfg_mode=BOOTP. Valid values are: – ddd.ddd.ddd.ddd (where ddd is a number 1–255). All values are valid for ETH-1. For ATM-1 and ATM-2, the value must be 255.255.255.255. GATEWAY: IP address of the default IP router (gateway) for this IP interface. Valid values are: – ddd.ddd.ddd.ddd (where ddd is a number 1–255) for ETH-1 only. – NONE: No gateway PHYADDR: Physical address associated with the port. Used by BOOTP on ETH-1. Valid values are: – xx-xx-xx-xx-xx-xx-xx-xx where each x is a hexadecimal digit (0–F). This must be the MAC address originally assigned to the unit if aid_port is ETH-1.
[pst]	Desired primary state. Valid values are: IS: In Service (default) OOS: Out Of Service (OOS-MA is implied) If no value is specified, this parameter remains unchanged.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ENT-IPPORT:[tid]:aid_ipport:[ctag]::cfg_mode:
ipport_nblk */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY;
   /* ENT-IPPORT:[tid]:aid_ipport:[ctag]::cfg_mode:
ipport_nblk */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 8-10. ENT-IPPORT Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year (two digits), month, and day
hh:mm:ss	Hour (00-23), minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Configure the SLIP port with a configuration mode of BOOTP and a physical address of 18-00-42-49-09-03-27-22.

```
ENT-IPPORT:TAMPA:SLIP:42::BOOTP:PHYADDR="18-00-42-49-09-03-2
7-22";

   TAMPA 00-11-24 12:30:43
M  42 COMPLD
   /*
ENT-IPPORT:TAMPA:SLIP:42::BOOTP:PHYADDR="18-00-42-49-09-03-2
7-22" */
;
```

Related Commands

DLT-ATMARPENT on page 8-2

ED-IPPORT on page 8-6

ENT-ATMARPENT on page 8-9

RTRV-IPPORT on page 8-19

REPT-OPSTAT-IPPORT

The command REPT-OPSTAT-IPPORT reports current operational parameters for an Internet Protocol port (or interface) in the NE.

Table 8-11. REPT-OPSTAT-IPPORT Command Parameters

REPT-OPSTAT-IPPORT:[tid]:aid_ipport:[ctag][:];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_ipport	Access identifier of the IP port to be entered. The value can be preceded with AID=, but this is not required. The valid values are: ATM-1: First IP-over-ATM interface in the NT ATM-2: Second IP-over-ATM interface in the NT ETH-1: First Ethernet interface in the NT Grouping and ALL are allowed.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* REPT-OPSTAT-IPPORT:[tid]:aid_ipport:[ctag][:] */
   "aid_ipport:op_ipport,value"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY;
    /* REPT-OPSTAT-IPPORT:[tid]:aid_ipport:[ctag][:] */
   "aid_ipport:ERRCDE=errcde
   /* error description */
;
```

Table 8-12. REPT-OPSTAT-IPPORT Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_ipport	Access identifier of the IP port to be entered. The value can be preceded with AID=, but this is not required. The valid values are: ATM-1: First IP-over-ATM interface in the NT ATM-2: Second IP-over-ATM interface in the NT ETH-1: First Ethernet interface in the NT Grouping and ranging are allowed.
[op_ipport]	IP port operational parameters. Valid values are: CURRATE: Displays the auto-sensed rate of operation of the Ethernet port or the current bandwidth associated with the ATM VCs in bps. The following rates are supported: – 0: The current bandwidth associated with the ATM VCs for the entry is 0 or the Ethernet port is disconnected or disabled. The bandwidth associated with UBR connections is 0 bps. – 10000000: The current auto-sensed rate on the Ethernet port is 10 Mbps. – 100000000: The current auto-sensed rate on the Ethernet port is 100 Mbps. CURDX: Displays the current line duplex mode. The following values are supported: – 2DX: The current auto-sensed mode is half-duplex (2-wire) operation (ETH-1 only). – 4DX: The current auto-sensed mode is full duplex (4-wire) operation (ETH-1, ATM-1, ATM-2). – NONE: The line is disconnected (ETH-1 only).
value	The value of the parameter as specified by op_ipport.

Example

Report IP port facility parameters for ETH-1.

```
REPT-OPSTAT-IPPORT:TAMPA:ETH-1

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* REPT-OPSTAT-IPPORT:TAMPA:ETH-1:42 */
   "ETH-1:CURRATE,100000000"
   "ETH-1:CURDX,4DX"
;
```

Related Commands

None

RTRV-ATMARPENT

The command RTRV-ATMARPENT retrieves entries in the ATM Address Resolution Protocol table.

Table 8-13. RTRV-ATMARPENT Command Parameters

RTRV-ATMARPENT:[tid]:aid_ipport:[ctag]::[ip_addr];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_ipport	Access identifier of the IP port. The value can be preceded with AID=, but this is not required. The valid values are: ATM-1: First IP-over-ATM interface in the NT ATM-2: Second IP-over-ATM interface in the NT Grouping is allowed and ALL may be used.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
ip_addr	The next-hop IP address associated with the port. Valid values are: ddd.ddd.ddd.ddd (where ddd is 1–255).

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-ATMARPENT:[tid]:aid_ipport:[ctag]::[ip_addr] */
   aid_ipport:ip_addr,vpi,vci,arpent_nblk
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY;
   /* RTRV-ATMARPENT:[tid]:aid_ipport:[ctag]::ip_addr */
   errcde
   /* error description */
;
```

Table 8-14. RTRV-ATMARPENT Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
[vpi]	The ATM Virtual Path Identifier associated with the virtual circuit for the entry.
[vci]	The ATM Virtual Channel Identifier associated with the virtual circuit for the entry.
[arpent_nblk]	The named parameter block for the ARP table containing the following parameter: BITRATE: Bandwidth associated with the ATM VC for the entry. The valid value is 0 (UBR).

Example

Retrieve the entry for ATM-2 port with IP address 123.201.143.71.

```
RTRV-ATMARPENT:TAMPA:ATM-1:42::123.201.143.71;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* RTRV-ATMARPENT:TAMPA:ATM-2:42::123.201.143.71 */
   ATM-1:143.201.173.41,0,32,BITRATE=0
;
```

Related Commands

DLT-ATMARPENT on page 8-2

ENT-IPPORT on page 8-11

RTRV-IPPORT

The RTRV-IPPORT command retrieves configuration data associated with an Internet Protocol port in the NE.

Table 8-15. RTRV-IPPORT Command Parameters

RTRV-IPPORT:[tid]:aid_ipport:[ctag][::::[pstf]];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_ipport	Access identifier of the IP port. The value can be preceded with AID=, but this is not required. The valid values are: ATM-1: First IP-over-ATM interface in the NT ATM-2: Second IP-over-ATM interface in the NT ETH-1: First Ethernet interface in the NT Grouping is allowed and ALL may be used.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
pstf	Primary State Filter. Valid values are: IS: Retrieve in-service entities only. OOS: Retrieve out-of-service entities only. If no value is specified, this filter is ignored.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-IPPORT:[tid]:aid_ipport:[ctag] */
   aid_ipport:cfg_mode:[ipport_nblk]::::pst
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY;
   /* RTRV-IPPORT:[tid]:aid_ipport:[ctag][:] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 8-16. RTRV-IPPORT Response Parameters (1 of 2)

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_ipport	As described for command parameters (see Table 8-15, RTRV-IPPORT Command Parameters), except that ALL is not used
cfg_mode	Configuration mode for the IP port. Values are: MANUAL: Port parameters are configured by the operator BOOTP: Port parameters are configured using the BOOTP protocol
ipport_nblk	Named parameter block for IP Port. The block consists of the following parameters separated by commas, each followed by an equal sign and a value. IPADDR: IP address associated with the port. Address entered by user if cfg_mode=MANUAL; auto-configured if cfg_mode=BOOTP. The format is: – ddd.ddd.ddd.ddd (where ddd is a number 0–255). NETMASK: IP address network mask. Configured value if cfg_mode=MANUAL; auto-configured if cfg_mode=BOOTP. The format is: – ddd.ddd.ddd.ddd (where ddd is a number 0–255). PHYADDR: Physical address associated with the port. Must be unique. The format is: – xx-xx-xx-xx-xx-xx-xx-xx (where each x is a hexadecimal digit 0–F). This is the MAC address originally assigned to the unit if aid_ipport=ETH-1.

Table 8-16. RTRV-IPPORT Response Parameters (2 of 2)

Parameter	Explanation
ipport_nblk *(continued)*	GATEWAY: IP address of the default IP router (gateway) for this IP interface. Valid values are: – ddd.ddd.ddd.ddd (where ddd is a number 1–255) for ETH-1 only – NONE: No gateway
[pst]	Primary State Filter. Valid values are IS-NR, OOS-AU, OOS-MA (transitory state, changes to OOS-AUMA), OOS-AUMA.

Example

Retrieve the configuration data associated with the ATM-1 port.

```
RTRV-IPPORT:TAMPA:ATM-1:42;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /*
;
```

Related Commands

DLT-ATMARPENT on page 8-2

ENT-IPPORT on page 8-11

Performance Commands

9

Overview

This chapter contains the following Performance commands:

REPT-OPSTAT-ADSLCOM

The REPT-OPSTAT-ADSLCOM command reports current operational parameters of ADSL lines that are common for both upstream and downstream directions.

Table 9-1. REPT-OPSTAT-ADSLCOM Command Parameters

REPT-OPSTAT-ADSLCOM:[tid]:aid_adsl:[ctag][:];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_adsl	Access identifier for ADSL lines. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: ADSL-rack-shelf-slot-circuit rack: – rack: Rack number (1) – shelf: Shelf number (1) – slot: LT slot number (1) – circuit: ADSL circuit on the LT (1–24)
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* REPT-OPSTAT-ADSLCOM:[tid]:aid_adsl:[ctag][:] */
   "aid_adsl:op_adslcom,value"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* REPT-OPSTAT-ADSLCOM:[tid]:aid_adsl:[ctag][:] */
   aid:ERRCDE=errcde
;
```

Table 9-2. REPT-OPSTAT-ADSLCOM Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_adsl	As described for command parameters (see Table 9-1, REPT-OPSTAT-ADSLCOM Command Parameters).
op_adsl	ADSL operational parameter. Parameters are: STATUSNE: Current status of near-end modem (ATU-C). Values are: – NORMAL: no failure condition – LOF: Loss Of Framing – LOS: Loss Of Signal – LORATE: Line rate is below planned rate (Loss of Signal Quality) – LOL: Loss Of Link – LOCD: Loss Of Cell Delineation – INITF: modem initialization failure – NOPEER: No peer ATU present STATUSFE: Current status of far-end modem (ATU-R). Values are: – NORMAL (no failure condition) – LOF (loss of framing) LOS (loss of signal) – LORATE: Line rate is below planned rate (Loss of Signal Quality) – LPR (loss of power to modem) LASTCHNGDATE: Date of last change in the operational state of the modem. Values are mm-dd (month and day), where mm= 00 – 12 and dd = 00 – 31. LASTCHNGTIME: Time of last change in the operational state of the modem. Values are hh-mm (hour and minute), where hh = 00 – 23 and mm = 00 – 59.
value	Value of parameter specified by op_adsl

Examples

Report ADSL DMT carrier operations parameters for ADSL-1-1-1-3.

```
REPT-OPSTAT-ADSLCOM:TAMPA:ADSL-1-1-1-3:42;

   TAMPA 01-10-24 12:30:43
M  42 COMPLD
   /* REPT-OPSTAT-ADSLCOM:TAMPA:ADSL-1-1-1-3:42  */
   "ADSL-1-1-1-3:STATUSNE,NORMAL"
   "ADSL-1-1-1-3:STATUSFE,NORMAL"
   "ADSL-1-1-1-3:LASTCHNGDATE,11-19"
   "ADSL-1-1-1-3:LASTCHNGTIME,18-42";
```

Related Commands

None

REPT-OPSTAT-ADSLDN

The REPT-OPSTAT-ADSLDN command reports operational parameters of ADSL lines in the downstream direction.

Table 9-3. REPT-OPSTAT-ADSLDN Command Parameters

REPT-OPSTAT-ADSLDN:[tid]:aid_adsl:[ctag][:];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_adsl	Access identifier for ADSL lines. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: ADSL-rack-shelf-slot-circuit – rack: Rack number (1) – shelf: Shelf number (1) – slot: LT slot number (1) – circuit ADSL circuit on the LT (1–24)
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* REPT-OPSTAT-ADSLDN:[tid]:aid_adsl:[ctag][:] */
   "aid_adsl:op_adsl,value"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* REPT-OPSTAT-ADSLDN:[tid]:aid_adsl:[ctag][:] */
   /* error description */
;
```

Table 9-4. REPT-OPSTAT-ADSLDN Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_adsl	As described for command parameters (see Table 9-3, REPT-OPSTAT-ADSLDN Command Parameters).
op_adsl	ADSL operational parameter. Values are: ATEN: Signal attenuation (0 – 60 dB) CELLSF: Rolling count of cells transmitted downstream on Fast channel CURFBR: Current Fast channel bit rate (32 – 2176 QOSCLASSF: Quality of Service for the ADSL Fast channel. The supported option is UBR (Unspecified bit rate). UBR is the default. NMR: Noise margin (0 – 31 dB) PWR: Transmitted signal power n (0–20 dB) RELCAP: Relative capacity operation. Configured bit rate as a percentage of the current bit rate (0 – 100)
value	Value of parameter specified by op_adsl

Example

Report downstream operations parameters for ADSL-1-1-1-3.

```
REPT-OPSTAT-ADSLDN:TAMPA:ADSL-1-1-1-3:42;

   TAMPA 01-10-24 12:30:43
M  42 COMPLD
   /* REPT-OPSTAT-ADSLDN:TAMPA:ADSL-1-1-1-3:42  */
   "ADSL-1-1-1-3:RELCAP,70"
   "ADSL-1-1-1-3:NMR,3"
   "ADSL-1-1-1-3:PWR,8"
   "ADSL-1-1-1-3:ATEN,4"
   "ADSL-1-1-1-3:CELLSF,1000"
;
```

Related Commands

REPT-OPSTAT-ADSLUP on page 9-7

REPT-OPSTAT-ADSLUP

The REPT-OPSTAT-ADSLUP command reports operational parameters of ADSL lines in the upstream direction.

Table 9-5. REPT-OPSTAT-ADSLUP Command Parameters

REPT-OPSTAT-ADSLUP:[tid]:aid_adsl:[ctag][:];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_adsl	Access identifier for ADSL lines. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: ADSL-rack-shelf-slot-circuit – rack: Rack number (1) – shelf: Shelf number (1) – slot: LT slot number (1) – circuit ADSL circuit on the LT (1–24)
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* REPT-OPSTAT-ADSLUP:[tid]:aid_adsl:[ctag][:] */
   "aid_adsl:op_adsl,value"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* REPT-OPSTAT-ADSLUP:[tid]:aid_adsl:[ctag][:] */
   /* error description */
;
```

Table 9-6. REPT-OPSTAT-ADSLUP Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_adsl	As described for command parameters (see Table 9-5, REPT-OPSTAT-ADSLUP Command Parameters).
op_adsl	ADSL operational parameter. Values are: ATEN: Signal attenuation (0 – 60 dB) CELLSF: Rolling count of cells transmitted upstream on Fast channel (received by ATU-C) CELLSDSCF: Rolling count of cells received on Fast channel and discarded for any reason CURFBR: Current Fast channel bit rate (32 – 2176 QOSCLASSF: Quality of Service for the ADSL Fast channel. The supported option is UBR (Unspecified bit rate). UBR is the default. EWL: Equivalent Working Length. Specifies the length of the DSL line. This value is used to limit transmit rates and maximum power settings according to local spectrum management guidelines. EWL is usually specified by the carrier. The default is 10 kft. The values supported are: – 8.5 to 14.5 kft in .5 kft increments – >14.5 kft POTSLVL: POTS Level. Specifies the voltage used to detect the presence of Plain Old Telephone Service (POTS) on the DSL line. The dafault is 3 volts. The values supported are: – 0 to 74 volts, in 1-volt increments (setting to 74 volts disables POTS detection) – Disable (disables POTS detection) NMR: Noise margin (0 – 31 dB) PWR: Transmitted signal power n (0–20 dB) RELCAP: Relative capacity operation. Configured bit rate as a percentage of the cuurent bit rate (0 – 100) UNKCELLSF: Rolling count of received cells discarded during cell header validation with unrecognized VPI/VCI values
value	Value of parameter specified by op_adsl

Example

Report upstream operations parameters for ADSL-1-1-1-3.

```
REPT-OPSTAT-ADSLUP:TAMPA:ADSL-1-1-1-3:42;

   TAMPA 01-10-24 12:30:43
M  42 COMPLD
   /* REPT-OPSTAT-ADSLUP:TAMPA:ADSL-1-1-1-3:42  */
   "ADSL-1-1-1-3:RELCAP,70"
   "ADSL-1-1-1-3:NMR,3"
   "ADSL-1-1-1-3:PWR,8"
   "ADSL-1-1-1-3:ATEN,4"
   "ADSL-1-1-1-3:CURFBR,36600"
;
```

Related Commands

REPT-OPSTAT-ADSLDN on page 9-5

REPT-OPSTAT-VCL

The REPT-OPSTAT-VCL command reports operational parameters for a Virtual Channel Link (VCL) on an NT or LT.

Table 9-7. REPT-OPSTAT-VCL Command Parameters

REPT-OPSTAT-VCL:[tid]:aid_vcl:[ctag][:];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_vcl	Virtual channel identifier for the virtual circuit. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: NTVCL-vpi-vci LTVCL-rack-shelf-slot-circuit-vpi-vci Grouping and ranging are allowed.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* REPT-OPSTAT-VCL:[tid]:aid_vcl:[ctag][:] */
   "aid_vcl:op_vcl,value"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* REPT-OPSTAT-VCL:[tid]:aid_vcl:[ctag][:] */
   "aid_VCL:ERRCDE=errcde"
   /* error description */
;
```

Table 9-8. REPT-OPSTAT-VCL Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_vcl	As described for command parameters (see Table 9-7, REPT-OPSTAT-VCL Command Parameters).
[op_vcl]	VCL operational parameters. Values are: INCELLS: Rolling count of cells received on this VCL OUTCELLS: Rolling count of cells transmitted on this VCL LPBKINCELLS: A count of test cells received since the test started (up to 2^{32}-1) LPBKOUTCELLS: A count of test cells received since the test started (up to 2^{32}-1) LPBKRTDELAY: Average round trip delay in milliseconds since the test has started. Only calculated on cells received; dropped cells are not counted. LPBKMNRTDELAY: Shortest round trip delay in milliseconds since the test has started. Only calculated on cells received; dropped cells are not counted. LPBKMXRTDELAY: Longest round trip delay in milliseconds since the test has started. Only calculated on cells received; dropped cells are not counted. LPBKTYPE: The type of OAM loopback test, if any, most recently performed on the VCL: – E2E: End-to-End OAM cell – SEG: Segment OAM cell – NOTST: No test has been performed on the VCL LPBKSEGID: The ATM segment location identifier for the segment loopback or blank.
value	Value of parameter specified by op_vcl

Example

Report VCL operations parameters for NTVCL-0-32.

```
REPT-OPSTAT-VCL:NTVCL-0-32;

   TAMPA 01-10-24 12:30:43
M  42 COMPLD
   /* REPT-OPSTAT-VCL:TAMPA:NTVCL-0-32*/
   "NTVCL-0-32:INCELLS,100000"
   "NTVCL-0-32:OUTCELLS,20000"
   "NTVCL-0-32:LPBKINCELLS,100000"
   "NTVCL-0-32:LPBKOUTCELLS,20000"
   "NTVCL-0-32:LPBKRTDELAY,100000"
   "NTVCL-0-32:LPBKMXRTDELAY,20000"
   "NTVCL-0-32:LPBKMNRTDELAY,100000"
   "NTVCL-0-32:LPBKTYPE,E2E"
;
```

Related Commands

None

Fault Commands

10

Overview

This chapter contains the following Fault commands:

RTRV-ALM-ADSL

The RTRV-ALM-ADSL command retrieves current alarms associated with an ADSL facility on an LT.

Table 10-1. RTRV-ALM-ADSL Command Parameters

RTRV-ALM-ADSL:[tid]:aid_adsl:[ctag]::[ntfcde],,[srveff],[locn],[dirn];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
aid_adsl	Access identifier for the ADSL line(s). Enter in the following format, replacing lower-case parameters with the values given: ADSL-rack-shelf-slot-circuit – rack: Rack Number (1) – shelf: Shelf Number (1) – slot: LT Slot Number (1) – circuit: ADSL circuit on the LT (1–24) (ranging allowed) Grouping and ranging are allowed. ALL may be used.
[ctag]	The correlation tag that links an input command with its associated output responses. It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.
[ntfncde]	Notification code. Valid values are: CR: Critical alarm MJ: Major alarm MN: Minor alarm Grouping is allowed. If no value is specified, ALL is assumed.
[serveff]	Service effect. Valid values are: SA: Service affecting NSA: Not service affecting Grouping is allowed. If no value is specified, ALL is assumed.
[locn]	Location of the condition. Valid values are: NEND: Near end FEND: Far end If no value is specified, ALL is assumed.
[dirn]	Signal direction. The valid value is RCV (Receive).

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-ALM-ADSL:[tid]:aid_adsl:[ctag]::[ntfncde]
,,[srveff] */
   "aid_adsl,aid_type:ntfncde,cond_adsl,serveff,,,locn,
dirn,:cond_descr"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY

   /* RTRV-ALM-ADSL:[tid]:aid_adsl:[ctag]::[ntfncde],,
[srveff] */
   errcde

;
```

Table 10-2. RTRV-ALM-ADSL Response Parameters (1 of 2)

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_adsl	As described for command parameters (see Table 10-1, RTRV-ALM-ADSL Command Parameters), except that ALL is not used.
[aid_type]	The type of Access Identifier. The value is ADSL.
ntfncde	As described for command parameters (see Table 10-1, RTRV-ALM-ADSL Command Parameters), except that ALL is not used.

Table 10-2. RTRV-ALM-ADSL Response Parameters (2 of 2)

Parameter	Explanation
cond	ADSL Condition. Valid values are: FACTERM: Modem could not initialize (near-end only) LCD-F: Loss of Cell Delineation (fast) (near-end only) LOF: Loss of Frame LOL: Loss of Link (near-end only) LOS: Loss of Signal (near-end only) LPR: Loss of Power (far-end only) LORATE: Line rate is below planned rate (Loss of Signal Quality)
serveff	As described for command parameters (see Table 10-1, RTRV-ALM-ADSL Command Parameters), except that ALL is not used.
locn	As described for command parameters (see Table 10-1, RTRV-ALM-ADSL Command Parameters).
dirn	As described for command parameters (see Table 10-1, RTRV-ALM-ADSL Command Parameters).
cond_descr	Description of alarm condition

Example

Retrieve all major service-affecting ADSL alarms for rack 1, shelf 1, slot 1, circuit 4.

```
RTRV-ALM-ADSL:TAMPA:ADSL-1-1-1-4:42::MJ,,SA;

   TAMPA 02-06-27 03:38:43
M  42 COMPLD
   /* RTRV-ALM-ADSL:TAMPA:ADSL-1-1-1-4:42::::  */
   "ADSL-1-1-1-4,ADSL:MJ,LPR,SA,,,NEND,RCV,:Loss of Power"

;
```

Related Commands

None

RTRV-ALM-ALL

The RTRV-ALM-ALL command retrieves current alarms in the NE.

Table 10-3. RTRV-ALM-ALL Command Parameters

RTRV-ALM-ALL:[tid]:aid_all:[ctag]::[ntfcde],,[srveff],[locn],[dirn];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
aid_all	Access identifier. The value is ALL.
[ctag]	The correlation tag that links an input command with its associated output responses. It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.
[ntfncde]	Notification code. Valid values are: CR: Critical alarm MJ: Major alarm MN: Minor alarm Grouping is allowed. If no value is specified, ALL is assumed.
[serveff]	Service effect. Valid values are: SA: Service affecting NSA: Not service affecting Grouping is allowed. If no value is specified, ALL is assumed.
[locn]	Location of the condition. Valid values are: NEND: Near end FEND: Far end If no value is specified, ALL is assumed.
[dirn]	Signal direction. Valid values are: RCV: Receive TRMT: Transmit If no value is specified, ALL is assumed.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-ALM-ALL:[tid]:aid_all:[ctag]::[ntfncde]
,,[srveff] */
   "aid_adsl,[aid_type]:ntfncde,cond_adsl,serveff,,,[locn],
[dirn],:[cond_descr]"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY

   /* RTRV-ALM-ALL:[tid]:aid_all:[ctag]::[ntfncde],,
[srveff] */
   errcde

;
```

Table 10-4. RTRV-ALM-ALL Response Parameters (1 of 2)

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid	Access identifier associated with the alarm. Valid values are: SHELF-rack-shelf LTA-rack-shelf-slot ADSL-rack-shelf-slot-circuit NTT1-circuit
[aid_type]	The type of Access Identifier.

Table 10-4. RTRV-ALM-ALL Response Parameters (2 of 2)

Parameter	Explanation
ntfncde	As described for command parameters (see Table 10-3, RTRV-ALM-ALL Command Parameters), except that ALL is not used.
cond	Condition. Valid values are: ACTLPBK: Facility placed in loopback. AIS: Alarm Indication Signal EQPT: Equipment failed self-test FACTERM: Modem could not initialize FANALAM-1: Alarm for Fan 1 FANALAM-2: Alarm for Fan 2 LCD: Loss of ATM cell delineation LCD-F: Loss of cell delineation (fast) LOF: Loss of Frame LOL: Loss of Link LOS: Loss of Signal/clock LPR: Loss of Power LORATE: Line rate is below planned rate (Loss of Signal Quality) PROGVER: Failed to load or find requested software RAI: Remote Alarm Indication RMTDLFAIL: Failed to download software SWROLLBACK: Software version rolled back
serveff	As described for command parameters (see Table 10-3, RTRV-ALM-ALL Command Parameters), except that ALL is not used.
[locn]	As described for command parameters (see Table 10-3, RTRV-ALM-ALL Command Parameters).
[dirn]	As described for command parameters (see Table 10-3, RTRV-ALM-ALL Command Parameters).
[cond_descr]	Description of alarm condition

Example

Retrieve all active, critical, service-affecting the TAMPA NE.

```
RTRV-ALM-ALL:TAMPA:ALL:42::CR,,SA;
```

```
   TAMPA 02-06-27 03:38:43
M  42 COMPLD
   /* RTRV-ALM-ALL:TAMPA:ALL:42::CR,,SA */
   "EQPT, EQPT:CR,INT,SA,,,NEND,RCV,:Unknown error in the
module"
;
```

Related Commands

None

RTRV-ALM-EQPT

The RTRV-ALM-EQPT command retrieves current alarms for specified equipment.

Table 10-5. RTRV-ALM-EQPT Command Parameters

RTRV-ALM-EQPT:[tid]:aid_eqpts:[ctag]::[ntfcde],,[srveff];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
aid_eqpts	Access identifier for the equipment. Each AID format can be preceded with AID=, but this is not required. Enter in the following format, replacing lower-case parameters with the values given: LT-rack-shelf-slot: All LT units LTA-rack-shelf-slot: LTA units SHELF-rack-shelf: shelf rack: Rack Number (1) shelf: Shelf Number (1) slot: LT Slot Number (1) Grouping is allowed. ALL may be used.
[ctag]	The correlation tag that links an input command with its associated output responses. It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.
[ntfncde]	Notification code. Valid values are: CR: Critical alarm MJ: Major alarm MN: Minor alarm Grouping is allowed. If no value is specified, ALL is assumed.
[serveff]	Service effect. Valid values are: SA: Service affecting NSA: Not service affecting Grouping is allowed. If no value is specified, ALL is assumed.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-ALM-EQPT:[tid]:aid_eqpts:[ctag]::[ntfncde]
,,[srveff] */
   "aid_eqpts[,aid_type]:ntfncde,cond_eqpt,serveff,,,[locn],
[dirn],:[cond_descr]"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY

   /* RTRV-ALM-EQPT:[tid]:aid_eqpt:[ctag]::[ntfncde],,
[srveff] */
   errcde

;
```

Table 10-6. RTRV-ALM-EQPT Response Parameters (1 of 2)

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_eqpts	As described for command parameters (see Table 10-5, RTRV-ALM-EQPT Command Parameters), except that ALL is not used.
[aid_type]	The type of Access Identifier. The value is ADSL.
ntfncde	As described for command parameters (see Table 10-5, RTRV-ALM-EQPT Command Parameters), except that ALL is not used.

Table 10-6. RTRV-ALM-EQPT Response Parameters (2 of 2)

Parameter	Explanation
cond_eqpt	Equipment condition. Valid values are: EQPT: Equipment failed self-test FANALM-1: Fan alarm for fan 1 FANALM-2: Fan alarm for fan 2 PROGVER: Failed to load or find requested software or configuration file RMTDLFAIL: Failed to download software or configuration SWROLLBACK: Software version rolled back
serveff	As described for command parameters (see Table 10-5, RTRV-ALM-EQPT Command Parameters), except that ALL is not used.
[cond_descr]	Description of alarm condition

Example

Retrieve all service-affecting critical alarms for Network Termination Unit B.

```
RTRV-ALM-EQPT:TAMPA:NTB::CR,,SA;


   TAMPA 02-06-27 03:38:43
M  42 COMPLD
   /* RTRV-ALM-EQPT:TAMPA:NTB:42::CR,SA  */
   ":NTB,EQPTS:CR,INT,SA,,,NEND,RCV,:Unknown error in
module"

;
```

Related Commands

None

RTRV-ALM-T1

The RTRV-ALM-T1 command retrieves current alarms for selected DS1 facilities.

Table 10-7. RTRV-ALM-T1 Command Parameters

RTRV-ALM-T1:[tid]:aid_ds1:[ctag]::[ntfcde],,[srveff],[locn],[dirn];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
aid_ds1	Access Identifier for the DS1 facility. Enter in the following format, replacing lower-case parameters with the values given: NTT: circuit circuit: DS1 circuit on the NT (1–4)
[ctag]	The correlation tag that correlates an input command with its associated output response(s). It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.
[ntfncde]	Notification code. Valid values are: CR: Critical alarm MJ: Major alarm MN: Minor alarm Grouping is allowed. If no value is specified, ALL is assumed.
[serveff]	Service effect. Valid values are: SA: Service affecting NSA: Not service affecting Grouping is allowed. If no value is specified, ALL is assumed.
[locn]	Location of the condition. Valid value is NEND (Near End).
[dirn]	Direction of the condition. Valid value is RCV (Receive).

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-ALM-T1:[tid]:aid_ds1:[ctag]::[ntfncde],,
[srveff],[locn],[dirn] */
   "aid_ds1,[aid_type]:ntfncde,cond_ds1,serveff,,,
locn,dirn:cond_descr"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-ALM-T1:[tid]:aid_ds1:[ctag]::[ntfncde],,[srveff],
[locn],[dirn] */
   errcde
   /* error description */
;
```

Table 10-8. RTRV-ALM-T1 Response Parameters (1 of 2)

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_ds1	As described for command parameters (see Table 10-7, RTRV-ALM-T1 Command Parameters), except that ALL is not used.
aid_type	The type of Access Identifier. The value is T1.
ntfncde	As described for command parameters, except that ALL is not used.

Table 10-8. RTRV-ALM-T1 Response Parameters (2 of 2)

Parameter	Explanation
cond_ds1	DS1 facility condition. Values are: AIS: Alarm Indication Signal LCD: Loss of ATM Cell Delineation LOF: Loss of Framing LOS: Loss of Signal/clock RAI: Remote Alarm Indication
serveff	As described for command parameters (see Table 10-7, RTRV-ALM-T1 Command Parameters), except that ALL is not used.
[locn]	Location of the condition. Valid value is NEND (Near end).
[dirn]	Direction of the condition. Valid value is RCV (Receive).
[cond_descr]	Description of alarm condition.

Example

Retrieve service-affecting critical alarms for NTT-1.

```
RTRV-ALM-T1:TAMPA:NTT-1:42::CR,,SA;

   TAMPA 02-04-20 10:30:23
M  42 COMPLD
   /* RTRV-ALM-T1:TAMPA:NTT-1:42::CR::SA  */
   "NTT-1,T1:CR,LOS,SA,,,NEND,RCV,:Loss of Signal/Clock"

;
```

Related Commands

None

RTRV-ATTR-ADSL

The RTRV-ATTR-ADSL command retrieves current attributes of activities related to the ADSL line.

Table 10-9. RTRV-ATTR-ADSL Command Parameters (1 of 2)

RTRV-ATTR-ADSL:[tid]:aidall_adsl:[ctag]::[ntfcde],[cond_adsl],[locn],[dirn];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
aidall_adsl	Access Identifier for all ADSL facilities. The value is ADSL.
[ctag]	The correlation tag that correlates an input command with its associated output response(s). It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.
[ntfncde]	Notification code. Valid values are: CR: Critical alarm MJ: Major alarm MN: Minor alarm NA: Not alarmed (reported via REPORT EVENT) NR: Not reported (information is stored in the NE) Grouping is allowed. If no value is specified, ALL is assumed.
[cond_adsl]	ADSL condition. Valid values are: FACTERM: Modem could not initialize (near end, major alarm) NOPEER: No peer ATU present (near end, not reported) LCD-F: Loss of Cell Delineation (fast) (near end, minor alarm) LOF: Loss of Frame (near end, far end, minor alarm) LOL: Loss of Link (near end, minor alarm) LORATE: Line rate is below planned rate (Loss of Cell Quality) (near end, far end, minor alarm) LOS: Loss of Signal (near end, minor alarm) LPR: Loss of Power (far end, minor alarm) LOFS-L: Loss of Frame Seconds (line) (near end, far end, not alarmed) LOLS-L: Loss of Link Seconds (line) (near end, far end, not alarmed) ES-L: Errored Seconds (line) (near end, far end, not alarmed) SES-L: Severely Errored Seconds (line) (near end, far end, not alarmed) UAS-L: Unavailable Seconds (line) (near end, far end, not alarmed)

Table 10-9. RTRV-ATTR-ADSL Command Parameters (2 of 2)

RTRV-ATTR-ADSL:[tid]:aidall_adsl:[ctag]::[ntfcde],[cond_adsl],[locn],[dirn];	
[cond_adsl] *(continued)*	INCRATE-F: Increasing rate (fast channel) (near end, far end, not alarmed). There is no corresponding standing condition clear message for this message. DECRATE-F: Decreasing rate (fast channel) (near end, far end, not alarmed). There is no corresponding standing condition clear message for this message. LPRS-L: Loss of Power Seconds (line) (far end only) (not alarmed) LOSS-L: Loss of Signal Seconds (line) (near end only) (not alarmed)
[locn]	Location of the condition. Valid values are: NEND: Near End FEND: Far End Only applicable to conditions supporting location. If no value is specified, ALL is assumed.
[dirn]	Direction of the condition. Valid value is RCV (Receive). ALL is not supported.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-ATTR-ADSL:[tid]:aidall_adsl:[ctag]::[ntfncde],
[cond_adsl],[locn],[dirn] */
  "aidall_adsl,aid_type:ntfncde,cond_adsl,[locn],[dirn]"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-ATTR-ADSL:[tid]:aidall_adsl:[ctag]::[ntfncde],
[cond_adsl],[locn],[dirn] */
   errcde
;
```

Table 10-10. RTRV-ATTR-ADSL Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aidall_adsl	As described for command parameters (see Table 10-9, RTRV-ATTR-ADSL Command Parameters), except that ALL is not used.
aid_type	The type of Access Identifier. The value is ADSL.
ntfncde	As described for command parameters (see Table 10-9, RTRV-ATTR-ADSL Command Parameters), except that ALL is not used.
cond_adsl	As described for command parameters (see Table 10-9, RTRV-ATTR-ADSL Command Parameters), except that ALL is not used.
[locn]	Location of the condition. Valid values are: NEND: Near End FEND: Far End
[dirn]	Direction of the condition. Valid values are: RCV: Receive TRMT: Transmit

Example

Retrieve major attributes for all ADSL facilities.

```
RTRV-ATTR-ADSL:TAMPA:ADSL:42::MJ;

   TAMPA 02-04-20 10:30:23
M  42 COMPLD
   /* RTRV-ATTR-ADSL:TAMPA:ADSL:42::MJ  */
   "ADSL,ADSL:MJ,LOS,NEND,RCV"
;
```

Related Commands

None

RTRV-ATTR-ALL

The RTRV-ATTR-ALL command retrieves current attributes of all conditions maintained by the NE.

Table 10-11. RTRV-ATTR-ALL Command Parameters (1 of 2)

RTRV-ATTR-ALL:[tid]:aid_all:[ctag]::[ntfcde],[cond_all],[locn],[dirn];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
aid_all_adsl	Access Identifier for all entities. The value is ALL.
[ctag]	The correlation tag that correlates an input command with its associated output response(s). It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.
[ntfncde]	Notification code. Valid values are: CR: Critical alarm MJ: Major alarm MN: Minor alarm NA: Not alarmed (reported via REPORT EVENT) NR: Not reported (information is stored in the NE). This value is supported for the ADSL condition NOPEER (no peer ATU present). Grouping is allowed. If no value is specified, ALL is assumed.
[cond_all]	Condition. Values are: ACTLPBK: Facility placed in loopback. AIS: Alarm Indication Signal EQPT: Equipment failed self-test FACTERM: Modem could not initialize FANALAM-1: Alarm for Fan 1 FANALAM-2: Alarm for Fan 2 LCD: Loss of ATM cell delineation LCD-F: Loss of Cell Delineation (Fast) LOF: Loss Of Frame LOFS-L: Loss Of Frame Seconds (Line) LOL: Loss Of Link LOLS-L: Loss Of Link Seconds (Line) ES-L: Errored Seconds (Line) SES-L: Severely Errored Seconds (Line) UAS-L: Unavailable Seconds (Line) INCRATE-F: Increasing Rate (Fast channel). There is no corresponding standing condition clear message.

Table 10-11. RTRV-ATTR-ALL Command Parameters (2 of 2)

RTRV-ATTR-ALL:[tid]:aid_all:[ctag]::[ntfcde],[cond_all], [locn],[dirn];	
[cond_all] *(continued)*	DECRATE-F: Decreasing Rate (Fast channel). There is no corresponding standing condition clear message. LPRS-L: Loss Of Power Seconds (Line) (far-end only) LOSS-L: Loss of Signal Seconds (Line) (near-end only) LOS: Loss Of Signal/clock LPR: Loss Of Power LORATE: Line rate is below planned rate (Loss of Signal Quality) PROGVER: Failed to load or find requested software RAI: Remote Alarm Indication RMTDLFAIL: Failed to download software SWROLLBACK: Software version rolled back Grouping is allowed. If no value is specified, ALL is assumed.
[locn]	Location of the condition. Valid values are: NEND: Near End FEND: Far End Only applicable to conditions supporting location. If no value is specified, ALL is assumed.
[dirn]	Direction of the condition. Valid values (for conditions supporting direction): RCV: Receive TRMT: Transmit If no value is specified, ALL is assumed.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-ATTR-ALL:[tid]:aid_all:[ctag]::[ntfncde],
[cond_all] */
  "aid,aid_type:ntfncde,cond,[locn],[dirn]"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-ATTR-ALL:[tid]:aid_all:[ctag]::[ntfncde],
[cond_all] */
   errcde
;
```

Table 10-12. RTRV-ATTR-ALL Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid	Access Identifier associated with the alarm. Valid values are: ADSL: All ADSL equipment EQPT: All equipment T1: All DS1 facilities
aid_type	The type of Access Identifier. Valid values are ADSL, EQPT, and T1.
ntfncde	As described for command parameters (see Table 10-11, RTRV-ATTR-ALL Command Parameters), except that ALL is not used.
cond	As described for command parameters (see Table 10-11, RTRV-ATTR-ALL Command Parameters), except that ALL is not used.
[locn]	Location of the condition. Valid values are: NEND: Near End FEND: Far End
[dirn]	Signal direction. Valid values are: RCV: Receive TRMT: Transmit

Example

Retrieve current attributes for all major conditions maintained by the TAMPA NE.

```
RTRV-ATTR-ALL:TAMPA:ALL:42::MJ;
```

```
   TAMPA 02-04-20 10:30:23
M  42 COMPLD
   /* RTRV-ATTR-ALL:TAMPA:ALL:42::MJ  */
   "ADSL,ADSL:MJ,LOS,NEND,RCV"
;
```

Related Commands

None

RTRV-ATTR-EQPT

The RTRV-ATTR-EQPT command retrieves current attributes of activities related to the equipment.

Table 10-13. RTRV-ATTR-EQPT Command Parameters

RTRV-ATTR-EQPT:[tid]:aidall_eqpt:[ctag]::[ntfcde],[cond_eqpt];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
aidall_eqpt	Access Identifier for all equipment. The value is EQPT.
[ctag]	The correlation tag that correlates an input command with its associated output response(s). It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.
[ntfncde]	Notification code. Valid values are: CR: Critical alarm MJ: Major alarm MN: Minor alarm NA: Not alarmed (reported via REPORT EVENT) NR: Not reported (information stored in the NE) Grouping is allowed. If no value is specified, ALL is assumed.
[cond_eqpt]	Equipment condition. Valid values are: EQPT: Equipment failed self-test FANALM-1: Fan alarm for Fan 1 FANALM-2: Fan alarm for Fan 2 PROGVR: Failed to load or find requested software or configuration RMTDLFAIL: Failed to download software or configuration SWROLLBACK: Software version rolled back Grouping is allowed. If no value is specified, ALL is assumed.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-ATTR-EQPT:[tid]:aidall_eqpt:[ctag]::[ntfncde],
[cond_eqpt] */
  "equip_type,aid_type:ntfncde,cond_eqpt"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-ATTR-EQPT:[tid]:aidall_eqpt:[ctag]::[ntfncde],
[cond_eqpt] */
   errcde
;
```

Table 10-14. RTRV-ATTR-EQPT Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
equip_type	As described for command parameters (see Table 10-13, RTRV-ATTR-EQPT Command Parameters).
aid_type	The type of Access Identifier. The value is EQPT.
ntfncde	As described for command parameters (see Table 10-13, RTRV-ATTR-EQPT Command Parameters), except that ALL is not used.
cond_eqpt	As described for command parameters (see Table 10-13, RTRV-ATTR-EQPT Command Parameters).

Example

Retrieve service-affecting critical alarms for equipment.

```
RTRV-ATTR-EQPT:TAMPA:EQPT:42::MJ;

   TAMPA 02-04-20 10:30:23
M  42 COMPLD
   /* RTRV-ATTR-EQPT:TAMPA:EQPT:42::MJ,  */
   "EQPT,EQPT:MJ,HITEMP,NEND,RCV"
;
```

Related Commands

None

RTRV-ATTR-T1

The RTRV-ATTR-T1 command retrieves current attributes of activities related to the DS1 facility.

Table 10-15. RTRV-ATTR-T1 Command Parameters

RTRV-ATTR-T1:[tid]:[aidall_t1]:[ctag]::[ntfcde],[cond_ds1],[locn],[dirn];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
[aidall_t1]	Access Identifier for all T1 (DS1) facilities. The value is T1.
[ctag]	The correlation tag that correlates an input command with its associated output response(s). It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.
[ntfncde]	Notification code. Valid values are: CR: Critical alarm MJ: Major alarm MN: Minor alarm NA: Not alarmed (reported via REPORT EVENT) Grouping is allowed. If no value is specified, ALL is assumed.
[cond_ds1]	DS1 facility condition. Valid values are: ACTLPBK: Facility placed in loopback (Default = NA) AIS: Alarm Indication Signal LCD: Loss of ATM Cell Delineation LOF: Loss of Framing (Default = MN) LOS: Loss of Signal/Clock (Default = MI) RAI: Remote Alarm Indication (Default = MN) If no value is specified, ALL is assumed.
[locn]	Location of the condition. Valid value is NEND (Near End). Only applicable to conditions supporting location.
[dirn]	Direction of the signal. Valid value is: RCV: Receive If no value is specified, ALL is assumed.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-ATTR-T1:[tid]:aidall_t1:[ctag]::[ntfncde],
[cond_dsl1],[locn],[dirn] */
  "aidall_adsl,aid_type:ntfncde,cond_t1,[locn],[dirn]"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /*
RTRV-ATTR-T1:[tid]:aidall_t1:[ctag]::[ntfncde],[cond_adsl],
[locn],[dirn] */
   errcde
;
```

Table 10-16. RTRV-ATTR-T1 Response Parameters (1 of 2)

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aidall_t1	As described for command parameters (see Table 10-15, RTRV-ATTR-T1 Command Parameters), except that ALL is not used.
aid_type	The type of Access Identifier. The value is T1.
ntfncde	As described for command parameters (see Table 10-15, RTRV-ATTR-T1 Command Parameters), except that ALL is not used.
cond_ds1	As described for command parameters (see Table 10-15, RTRV-ATTR-T1 Command Parameters).

Table 10-16. RTRV-ATTR-T1 Response Parameters (2 of 2)

Parameter	Explanation
[locn]	Location of the condition. Valid values are: NEND: Near End FEND: Far End
[dirn]	Direction of the condition. Valid values are: RCV: Receive TRMT: Transmit

Example

Retrieve critical attributes for T1 conditions.

```
RTRV-ATTR-T1:TAMPA:T1:42::CR;

   TAMPA 02-04-20 10:30:23
M  42 COMPLD
   /* RTRV-ATTR-T1:TAMPA:T1:42::CR  */
   "T1,T1:CR,LOF,NEND,RCV"
;
```

Related Commands

None

RTRV-COND-ADSL

The RTRV-COND-ADSL command retrieves the current condition of selected ADSL line-related alarm indicators.

Table 10-17. RTRV-COND-ADSL Command Parameters

RTRV-COND-ADSL:[tid]:aid_adsl:[ctag]::[cond_adsl],[locn],[dirn];	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
aid_adsl	Access identifier for the ADSL line(s). Enter in the following format, replacing lower-case parameters with the values given: ADSL-rack-shelf-slot-circuit – rack: Rack Number (1) – shelf: Shelf Number (1) – slot: LT Slot Number (1) – circuit: ADSL circuit on the LT (1– 24) (ranging allowed) Grouping and ranging are allowed.
[ctag]	The correlation tag that correlates an input command with its associated output response(s). It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.
[cond_adsl]	ADSL condition. Valid values are: NOPEER: No peer ATU present (Near End only) FACTERM: Modem could not initialize (Near End only) LCD-F: Loss of Cell Delineation (Fast) LOS: Loss of Signal (Near End only) LOF: Loss of frame LOL: Loss of Link (Near End only) LPR: Loss of Power (Far End only) LORATE: Line rate is below planned rate (Loss of Signal Quality)
[locn]	Facility location. Valid values are: NEND: Near end FEND: Far end If no value is specified, ALL is assumed.
[dirn]	Signal direction. Valid value is RCV Receive.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /*
RTRV-COND-ADSL:[tid]:aid_adsl:[ctag]::[cond_adsl],[locn],[di
rn] */
"aid_adsl,aid_type:ntfncde,cond_adsl,serveff,,,locn,dirn,,
cond_descr"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /*
RTRV-COND-ADSL:[tid]:aid_adsl:[ctag]::[cond_adsl],[locn]
   */
   errcde
;
```

Table 10-18. RTRV-COND-ADSL Command Parameters (1 of 2)

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year (last two digits), month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_adsl	As described for command parameters, except that ALL is not used.
aid_type	The type of Access Identifier. The value is ADSL.

Table 10-18. RTRV-COND-ADSL Command Parameters (2 of 2)

Parameter	Explanation
[ntfncde]	Notification code. Valid values are: CR: Critical alarm MJ: Major alarm MN: Minor alarm
cond_adsl	ADSL Condition. Valid values are: LORATE: Loss of Signal Quality LOS: Loss of Signal (Near End only) LOF: Loss of Frame LPR: Loss of Power (Far End only) FACTERM Modem could not initialize (Near End only) LOL: Loss of Link (Near End only) LCD: Loss of Cell Delineation (fast) (Near End only)
serveff	Service effect. Valid values are: SA: Service affecting NSA: Not service affecting
[locn]	As described for command parameters (see Table 10-17, RTRV-COND-ADSL Command Parameters).
[dirn]	As described for command parameters (see Table 10-17, RTRV-COND-ADSL Command Parameters).
[cond_descr]	Description of alarm condition.

Example

Retrieve near-end loss-of-signal condition of ADSL line for rack 1, shelf 1, slot 1, circuit 3.

```
RTRV-COND-ADSL:TAMPA:ADSL-1-1-1-3:42::LOS,NEND;

   TAMPA 02-06-29 11:36:43
M  42 COMPLD
   /* RTRV-COND-ADSL:RALGH:ADSL-1-1-1-3:42::LOS,NEND,  */

   "ADSL-1-1-1-3,ADSL:MN,LOS,NSA,,,NEND,,,Loss of Signal"

;
```

Related Commands

None

RTRV-COND-ALL

The RTRV-COND-ALL command retrieves the condition of NE alarm indicators.

Table 10-19. RTRV-COND-ALL Command Parameters (1 of 2)

RTRV-COND-ALL:[tid]:aid_all:[ctag]::[cond_all],[locn],[dirn];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
aid_all	Access Identifier for all entities. The value is ALL.
[ctag]	The correlation tag that correlates an input command with its associated output response(s). It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.
[cond_all]	Condition. Values are: ACTLPBK: Facility placed in loopback. AIS: Alarm Indication Signal EQPT: Equipment failed self-test FACTERM: Modem could not initialize FANALAM-1: Alarm for Fan 1. FANALAM-2: Alarm for Fan 2. LCD: Loss of ATM Cell Delineation LCD-F: Loss of Cell Delineation (Fast) LOF: Loss Of Frame LOL: Loss Of Link LOS: Loss Of Signal/clock LPR: Loss Of Power PROGVER: Failed to load or find requested software RAI: Remote Alarm Indication RMTDLFAIL: Failed to download software SWROLLBACK: Software version rolled back
[locn]	Location of the condition. Valid values are: NEND: Near End FEND: Far End Only applicable to conditions supporting location. If no value is specified, ALL is assumed.

Table 10-19. RTRV-COND-ALL Command Parameters (2 of 2)

RTRV-COND-ALL:[tid]:aid_all:[ctag]::[cond_all],[locn], [dirn];	
[dirn]	Direction of the condition. Valid values (for conditions supporting direction): RCV: Receive TRMT: Transmit If no value is specified, ALL is assumed.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /*
RTRV-COND-ALL:[tid]:aid_all:[ctag]::[cond_all],[locn],[dirn]
*/
  "aid,[aid_type]:ntfncde,cond,[serveff],,,[locn],[dirn],,
[cond_descr]"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /*
RTRV-COND-ALL:[tid]:aid_all:[ctag]::[cond_all],[locn],[dirn]
*/
   errcde
;
```

Table 10-20. RTRV-COND-ALL Response Parameters (1 of 2)

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed

Table 10-20. RTRV-COND-ALL Response Parameters (2 of 2)

Parameter	Explanation
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid	Access Identifier of the entity reporting the alarm. Valid values are: SHELF-rack-shelf NTA LTA-rack-shelf-slot ADSL-rack-shelf-slot-circuit NTT1-circuit
aid_type	The type of Access Identifier. Valid values are ADSL, EQPT, and T1.
[ntfncde]	Notification code. Values are: CR: Critical alarm MJ: Major alarm MN: Minor alarm NA: Not alarmed (reported via REPORT EVENT) NR: Not reported (information is stored in the NE). This value is supported for the ADSL condition NOPEER (no peer ATU present).
cond	As described for command parameters (see Table 10-19, RTRV-COND-ALL Command Parameters), except that ALL is not used.
[serveff]	Service effect. Values are: SA: Service affecting NSA: Not service affecting
[locn]	Location of the condition. Valid values are: NEND: Near End FEND: Far End
[dirn]	Signal direction. Valid values are: RCV: Receive TRMT: Transmit

Example

Retrieve current attributes for all near-end conditions maintained by the TAMPA NE.

```
RTRV-COND-ALL:TAMPA:ALL:42::MJ;
```

```
   TAMPA 02-04-20 10:30:23
M  42 COMPLD
   /* RTRV-COND-ALL:TAMPA:ALL:42::,NEND,  */
   "ALL,ALL:MN,LOS,NSA,,,NEND,,,Loss of Signal"
;
```

Related Commands

None

RTRV-COND-EQPT

The RTRV-COND-EQPT command retrieves the current condition of specified equipment alarm indicators.

Table 10-21. RTRV-COND-EQPT Command Parameters

RTRV-COND-EQPT:[tid]:aidall_eqpt:[ctag]::[ntfcde],[cond_eqpt];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
aid_eqpt	Access Identifier for a piece of equipment. The value can be preceded with aid=, but this is not required. Grouping is allowed. Valid values are: ALL: All equipment units SHELF-rack-shelf LT-rack-shelf-slot: All LT units in slot LTA-rack-shelf-slot: LT unit A (main card) rack: rack number (1) shelf: shelf number (1) slot: LT slot number (1) Grouping is allowed. If no value is specified, ALL is assumed.
[ctag]	The correlation tag that correlates an input command with its associated output response(s). It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.
[cond_eqpt]	Equipment condition. Valid values are: EQPT: Equipment failed self-test FANALM-1: Fan alarm for Fan 1 FANALM-2: Fan alarm for Fan 2 PROGVER: Failed to load or find requested software RMTDLFAIL: Failed to download software SWROLLBACK: Software version rolled back Grouping is allowed. If no value is specified, ALL is assumed.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-COND-EQPT:[tid]:aid_eqpt:[ctag]::[cond_eqpt] */

"aid_eqpt,[aid_type]:[ntfncde],cond_eqpt,serveff,,,,,{cond_
descr}"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-COND-EQPT:[tid]:aid_eqpt:[ctag]::[cond_eqpt] */
   errcde
;
```

Table 10-22. RTRV-COND-EQPT Response Parameters (1 of 2)

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_eqpt	As described for command parameters (see Table 10-21, RTRV-COND-EQPT Command Parameters), except ALL is not used.
aid_type	The type of Access Identifier. The value is EQPT.
[ntfncde]	Notification code. Valid values are: CR: Critical alarm MJ: Major alarm MN: Minor alarm NA: Not alarmed (reported via REPORT EVENT)

Table 10-22. RTRV-COND-EQPT Response Parameters (2 of 2)

Parameter	Explanation
cond_eqpt	As described for command parameters (see Table 10-21, RTRV-COND-EQPT Command Parameters).
serveff	Service effect. Valid values are: – SA: Service affecting – NSA: Not service affecting
[cond_descr]	Description of alarm condition.

Example

Retrieve current condition of LT alarm indicators.

```
RTRV-COND-EQPT:TAMPA:LT:42:::;

   TAMPA 02-04-20 10:30:23
M  42 COMPLD
   /* RTRV-COND-EQPT:TAMPA:LT:42::  */
   "LT:MJ,HITEMP,SA,,,,,Module temperature exceeded limit"
;
```

Related Commands

None

RTRV-COND-T1

The RTRV-COND-T1 command retrieves current conditions of a DS1 facility.

Table 10-23. RTRV-COND-T1 Command Parameters

RTRV-COND-T1:[tid]:aid_ds1:[ctag]::[cond_ds1],[locn],[dirn];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
aid_ds1	Access Identifier for the environment. Valid value is: NTT1-circuit – circuit: DS1 circuit on the NT
[ctag]	The correlation tag that correlates an input command with its associated output response(s). It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.
[cond_ds1]	DS1 facility condition. Valid values are: ACTLPBK: Facility placed in loopback AIS: Alarm Indication Signal LCD: Loss of ATM Cell Delineation LOF: Loss of Framing LOS: Loss of Signal/Clock RAI: Remote Alarm Indication If no value is specified, ALL is assumed. Grouping is allowed.
[locn]	Location of the condition. Valid value is NEND (Near End).
[dirn]	Direction of the signal. Valid value is: RCV: Receive If no value is specified, ALL is assumed.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-COND-T1:[tid]:aid_ds1:[ctag]::[cond_dsl1],[locn],
[dirn] */

"aid_ds1,[aid_type]:ntfncde,cond_ds1,serveff,,,[locn],[dirn]
,,[cond_descr]"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-COND-T1:[tid]:aid_ds1:[ctag]::[cond_ds1], [locn],
*/
   errcde
/* error description */
;
```

Table 10-24. RTRV-COND-T1 Response Parameters (1 of 2)

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_ds1	As described for command parameters (see Table 10-23, RTRV-COND-T1 Command Parameters).
aid_type	The type of Access Identifier. The value is T1.

Table 10-24. RTRV-COND-T1 Response Parameters (2 of 2)

Parameter	Explanation
ntfncde	Notification code. Valid values are: CR: Critical alarm MJ: Major alarm MN: Minor alarm NA: Not alarmed (reported via REPORT EVENT) NR: Not reported (information is stored in the NE)
cond_ds1	As described for command parameters (see Table 10-23, RTRV-COND-T1 Command Parameters), except ALL is not used.
[locn]	Location of the condition. Valid values are: NEND: Near End FEND: Far End
serveff	Service effect. Valid values are: SA: Service affecting NSA: Not service affecting
[dirn]	As described for command parameters (see Table 10-23, RTRV-COND-T1 Command Parameters), except ALL is not used.

Example

Retrieve current conditions for NTT1 facility.

```
RTRV-COND-T1:TAMPA:NTT1:42::,;

   TAMPA 02-04-20 10:30:23
M  42 COMPLD
   /* RTRV-COND-T1:TAMPA:NTT1:42::,  */
   "NTT1-1,T1:CR,LOS,SA,,,NEND,,,Loss of Signal/Clock"
;
```

Related Commands

None

Log Commands

11

Overview

This chapter contains the following Log commands:

INIT-LOG

The INIT-LOG command initializes selected logs.

Table 11-1. INIT-LOG Command Parameters

INIT-LOG:[tid]:[logid]:[ctag]::lognm;	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
logid	COM is the only allowed value other than NULL for the AID field.
[ctag]	The correlation tag that correlates an input command with its associated output response(s). It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.
lognm	Names of logs to be initialized. Valid values are: UNKCELL–[aid_atmport]: Unknown cell log for the ATM interface (see ED-ATMPORT). SYSTEM: System log containing records of all significant system events (alarms, events, database chages, ftp file transfer status, and security messages). ALL: All logs.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* INIT-LOG:[tid]:[logid]:[ctag]::lognm */

;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* INIT-LOG:[tid]:[logid]:[ctag]::lognm */
   errcde
;
```

Table 11-2. INIT-LOG Response Parameters

Parameter	Explanation
sid	Source NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Initialize the SYSTEM log.

```
INIT-LOG:TAMPA::40::SYSTEM;

   TAMPA 02-07-24 10:30:43
M  40 COMPLD
   /* INIT-LOG:TAMPA::40::SYSTEM */
;
```

Related Command

RTRV-LOG on page 11-4

RTRV-LOG

The RTRV-LOG command retrieves selected logs.

Table 11-3. RTRV-LOG Command Parameters

RTRV-LOG:[tid]:[log_id]:[ctag]::lognm;	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
log_id	COM is the only allowed value other than NULL.
[ctag]	The correlation tag that correlates an input command with its associated output response(s). It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.
lognm	Names of logs to be retrieved. ALL is not supported. Valid values are: UNKCELL– [aid_atmport]: Unknown cell log for the ATM interface. SYSTEM: System log containing records of all significant system events (alarms, events, database chages, ftp file transfer status, and security messages). SECURITY: Security messages (from the system log).

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-LOG:[tid]:[aid_log]:[ctag]:lognm */
   /* logdump */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-LOG:[tid]:[aid_log]:[ctag]:lognm */
   errcde
;
```

Table 11-4. RTRV-LOG Response Parameters

Parameter	Explanation
sid	Source NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
lognm	As described for command parameters (see Table 11-3, RTRV-LOG Command Parameters).
logdump	Memory dump of log buffer.

Example

Retrieve the SECURITY log.

```
RTRV-LOG:TAMPA::40::SECURITY;
```

```
   TAMPA 02-07-24 10:30:43
M  40 COMPLD
   /* RTRV-LOG:TAMPA::40::SECURITY */
   (dump of log buffer)
;
```

Related Command

INIT-LOG on page 11-2

Security Commands

12

Overview

This chapter contains the following Security commands:

DLT-USER-SECU

The DLT-USER-SECU command deletes a user account from the NE database.

Table 12-1. DLT-USER-SECU Command Parameters

DLT-USER-SECU:[tid]:uid:[ctag][:];	
RESTRICTIONS: All parameters in this command are position-defined. At leased one superuser account must remain at all times.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
uid	User identification name (10 characters maximum). Input is case-sensitive. Grouping is allowed. ALL is not supported.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* DLT-USER-SECU:[tid]:uid:[ctag] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* DLT-USER-SECU:[tid]:uid:[ctag] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 12-2. DLT-USER-SECU Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Delete user RICHARD.

```
DLT-USER-SECU:TAMPA:RICHARD:42;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* DLT-USER-SECU:TAMPA:RICHARD:42 */
;
```

Related Commands

ED-USER-SECU on page 12-8

ENT-USER-SECU on page 12-10

RTRV-USER-SECU on page 12-14

ED-CID-SECU

The ED-CID-SECU command edits the configuration data associated with the Channel Identifier (CID). The privilege codes associated with a CID define the maximum privilege level of commands in each category (maintenance, configuring, security, testing) that can be executed from that CID. Commands requiring a higher privilege level are refused.

Table 12-3. ED-CID-SECU Command Parameters

ED-CID-SECU:[tid]:cid:[ctag]::chap:[cid_nblk];	
RESTRICTIONS: All parameters in this command are position-defined. A maximum of four remote (telnet) users and one Console terminal sessions can be active simultaneously.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
cid	Channel identifier. Grouping is allowed. Valid values are: CRAFT: Local console interface REMOTE: Remote console interface
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses.
chap	Channel Access Privilege. Specifies the maximum access privilege for commands on a channel. The only valid value is SUPER (maximum user privilege).
[cid_nblk]	Named parameter block for CID. The block consists of one or more of the following parameters, in any order separated by commas, each followed by an equal sign and a valid value. If not specified, the values of these parameters remain unchanged. MXINV: Maximum number of invalid logon alerts (3) before declaring an intrusion alert. TMOUT: Timeout interval for a user session, in minutes (0–99). If the user is idle for this long, the session is automatically terminated. The default is 10. A value of 0 disables the feature.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /*
ED-CID-SECU:[tid]:cid:[ctag]::chap,:[cid_nblk] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /*
ED-CID-SECU:[tid]:cid:[ctag]::chap:[cid_nblk] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 12-4. ED-CID-SECU Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Edit the local console interface to declare an intrusion alert after 3 invalid logon attempts.

```
ED-CID-SECU:TAMPA:CRAFT:42::MXINV=3;
```

```
   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* ED-CID-SECU:TAMPA:CRAFT:42::MXINV=3 */
;
```

Related Command

RTRV-CID-SECU on page 12-12

ED-PID

The ED-PID command edits a user's own Private Identifier (password).

Table 12-5. ED-PID Command Parameters

ED-PID:[tid]:uid:[ctag]::oldpid,newpid;	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
uid	User Identification Name (10 characters maximum). Grouping is allowed. Input is case-sensitive.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses.
oldpid	Old password.
newpid	New password (8–10 characters). Must include at least one digit, one letter, and one nonalphanumeric character. Input is case-sensitive. The newpid and oldpid values must be different.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /*
ED-PID:[tid]:uid:[ctag]::oldpid,newpid */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /*
ED-PID:[tid]:uid:[ctag]::oldpid,newpid */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 12-6. ED-PID Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Change Richard's password from RCC-1210D to NR-12345.

```
ED-PID:TAMPA:RICHARD:42::RCC-1210D,NR-12345;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* ED-PID:TAMPA:RICHARD:42::RCC-1210D,NR-12345 */
;
```

Related Command

None

ED-USER-SECU

The ED-USER-SECU command edits the security levels and other security-related parameters for a user.

NOTE:

You must enter a password to use the ED-USER-SECU command.

Table 12-7. ED-USER-SECU Command Parameters

ED-USER-SECU:[tid]:uid:[ctag]::[newuid],[newpid],,[uap][:];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
uid	User Identification name (10 characters maximum). Input is case-sensitive.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
[newuid]	New User Identification name (10 characters maximum). Input is case-sensitive. The value must be unique within the NE. If not specified, the value of this parameter remains unchanged.
[newpid]	New password (8–10 characters). The value must include at least one digit, one letter, and one non-alphanumeric character. Input is case-sensitive. If not specified, the value of this parameter remains unchanged.
[uap]	User Access Privilege. Valid values are: NULL: User has no access rights. RTRV: Retrieve. Report and retrieve commands only (no configuring). PROV: Configuring (provisioning). Report, retrieve, and configuring commands allowed. No system administrator tasks including management of the NE. SUPER: Supervisor. All user functions allowed.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /*
ED-USER-SECU:[tid]:uid:[ctag]::[newid],[newpid],[skipped],
[uap]:skipped1 */;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /*
ED-USER-SECU:[tid]:uid:[ctag]::[newuid],[newpid],[skipped],
[uap]:skipped1 */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 12-8. ED-USER-SECU Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Change RICHARD's password to NR-12345 and set his privilege code for configuration commands to retrieve.

```
ED-USER-SECU:TAMPA:RICHARD:42::,NR-12345,,RTRV;
```

```
   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* ED-USER-SECU:TAMPA:RICHARD:42::,NR-12345,,RTRV */
;
```

Related Commands

DLT-USER-SECU on page 12-2

ENT-USER-SECU on page 12-10

RTRV-USER-SECU on page 12-14

ENT-USER-SECU

The ENT-USER-SECU command defines the security levels and other security-related parameters for a specified user. One default user will be supported (UID=SUPERUSER, PID=ASN#1500, UAP=SUPER).

Table 12-9. ENT-USER-SECU Command Parameters

ENT-USER-SECU:[tid]:uid:[ctag]::pid,,[uap][:];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
uid	User Identification name (10 characters maximum). Input is case-sensitive.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
pid	Password (8–10 characters). The value must include at least one digit, one letter, and one non-alphanumeric character. Input is case-sensitive.
[uap]	User Access Privilege. Valid values are: NULL: User has no access rights. RTRV: Retrieve. Report and retrieve commands only (no configuring). PROV: Configuring (provisioning). Report, retrieve, and configuration commands allowed. No system administrator tasks including management of the NE. SUPER: Supervisor. All user functions allowed.
uid_nblk	Named parameter block for UID.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ENT-USER-SECU:[tid]:uid:[ctag]::pid,,[uap][:]*/
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* ENT-USER-SECU:[tid]:uid:[ctag]::pid,,[uap] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 12-10. ENT-USER-SECU Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Define RICHARD's password as NR-12345 and set his privilege code for configuration commands to SUPER.

```
ENT-USER-SECU:TAMPA:RICHARD:42::,NR-12345,,SUPER;
```

```
   TAMPA 00-11-24 12:30:43
M  42 COMPLD
   /* ENT-USER-SECU:TAMPA:RICHARD:42::,NR-12345,,SUPER */
;
```

Related Commands

ENT-USER-SECU on page 12-10

ED-USER-SECU on page 12-8

RTRV-USER-SECU on page 12-14

RTRV-CID-SECU

The RTRV-CID-SECU command retrieves the configuration data associated with the Channel Identifiers (CID).

Table 12-11. RTRV-CID-SECU Command Parameters

RTRV-CID-SECU:[tid]:cid:[ctag][:];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
cid	Calling address identifier. Valid values are: CRAFT: Local console interface REMOTE: Remote console interface
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-CID-SECU:[tid]:cid:[ctag] */
      "cid:chap:cid_nblk"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-CID-SECU:[tid]:cid:[ctag] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 12-12. RTRV-CID-SECU Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
cid	As described for command parameters (see Table 12-11, RTRV-CID-SECU Command Parameters), except that ALL is not used
chap	Channel Access Privilege. Access privilege is not assigned per channel, so the highest user privilege is displayed.
[cid_nblk]	Named parameter block for CID. The block consists of one or more of the following parameters, each followed by an equal sign and a value. MXINV: Maximum number of invalid logon alerts before declaring an intrusion alert (3). TMOUT: Timeout interval (in minutes) for a user session (0–99). If the user is idle for this long, the session is automatically terminated. A value of 0 disables the feature.
errcde	Error code (see Appendix A, *Error Codes*)

Example

Retrieve the configuration data for the local console interface.

```
RTRV-CID-SECU:TAMPA:CRAFT:42;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* RTRV-CID-SECU:TAMPA:CRAFT:42 */
;
    "CRAFT:SUPER,MXINV=3,
   TMOUT=10"
```

Related Command

ED-CID-SECU on page 12-4

RTRV-USER-SECU

The RTRV-USER-SECU command retrieves the security levels for a specified user. The user's password cannot be retrieved.

Table 12-13. RTRV-USER-SECU Command Parameters

RTRV-USER-SECU:[tid]:uid:[ctag][:];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
uid	User Identification name (10 characters maximum). Input is case-sensitive. ALL is supported.
[ctag]	Correlation tag (6 characters) maximum that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-USER-SECU:[tid]:uid:[ctag][:] */
   "uid:uap:uid_nblk"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-USER-SECU:[tid]:uid:[ctag][:] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 12-14. RTRV-USER-SECU Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year (two digits), month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
uid	As described for command parameters
uap	User Access Privilege. Valid values are: NULL: User has no access rights. RTRV: Retrieve. Report and retrieve commands only (no configuring). PROV: Configuring (provisioning). Report, retrieve, and configuration commands allowed. No system administrator tasks including management of the NE. SUPER: Supervisor. All user functions allowed.
[uid_nblk]	Named parameter block for UID. The block consists of one or more of the following parameters, each followed by an equal sign and a value. PAGE: The password aging interval (0). A value of 0 disables the feature. UAGE: The UID aging interval (0). The UID is disabled if no successful logon occurs during this period. A value of 0 disables the feature.
errcde	Error code (see Appendix A, *Error Codes*)

Example

Retrieve the security levels for user RICHARD.

```
RTRV-USER-SECU:TAMPA:RICHARD:42;

   TAMPA 01-11-24 12:30:43
M  42 COMPLD
   /* RTRV-USER-SECU:TAMPA:RICHARD:42 */

  "RICHARD:RTRV:PAGE=0,UAGE=0"
;
```

Related Commands

DLT-USER-SECU on page 12-2

ED-USER-SECU on page 12-8

ENT-USER-SECU on page 12-10

Synchronization Commands

13

Overview

This chapter contains the following Synchronization commands:

ED-SYNCN

The ED-SYNCN Command configures the reference source for synchronization of the NE clock.

Table 13-1. ED-SYNCN Command Parameters

ED-SYNCN:[tid]:[aid_syncn]:[ctag]:::[syncn_nblk];	
Restrictions: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
[aid_syncn]	AID of the NE clock. The value is CLKSRCNT.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
syncn_nblk	Named parameter block for SYNCN. The block consists of one or more of the following parameters, in any order separated by commas, each followed by an equal sign and a valid value. If not specified, the value of this parameter remains unchanged. PRICREF: Primary reference source for synchronizing the clock. Valid values are: – LOOP: Loop timing recovered from network side facility – LOCAL: Local oscillator on NT board

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ED-SYNCN:[tid]:[aid_syncn]:[ctag]:::[syncn_nblk] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* ED-SYNCN:[tid]:[aid_syncn]:[ctag]:::[syncn_nblk] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 13-2. ED-SYNCN Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Configure the NE clock to use the local oscillator as its primary reference source.

```
ED-SYNCN:TAMPA:CLKSRCNT:42:::PRICREF=LOCAL;

   TAMPA 01-12-20 11:20:34
M  42 COMPLD
   /* ED-SYNCN:TAMPA:CLKSRCNT:42:::PRICREF=LOCAL*/
;
```

Related Commands

RTRV-SYNCN on page 13-6

RD-SYNCN

The RD-SYNCN Command retrieves the current reference source for synchronization of the NE clock.

Table 13-3. RD-SYNCN Command Parameters

RD-SYNCN:[tid]:[aid_syncn]:[ctag][:];	
Restrictions: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
[aid_syncn]	AID of the NE clock. The value is CLKSRCNT.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RD-SYNCN:[tid]:aid_syncn:[ctag][:] aid_syncn,cref */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RD-SYNCN:[tid]:aid_syncn:[ctag][:] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 13-4. RD-SYNCN Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
aid_syncn	As described for common parameters
cref	Primary reference source for synchronizing the clock. Values are: PRI-LOOP = Loop timing recovered from network-side facility PRI-LOCAL = Local oscillator on NT board
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Retrieve the NE clock source.

```
RD-SYNCN:TAMPA:CLKSRCNT:42;

   TAMPA 01-12-20 11:20:34
M  42 COMPLD
   /* RD-SYNCN:TAMPA:CLKSRCNT:42*/
;
```

Related Commands

None

RTRV-SYNCN

The RTRV-SYNCN Command retrieves the configuration of the reference source for synchronization of the NE clock.

Table 13-5. RTRV-SYNCN Command Parameters

RTRV-SYNCN:[tid]:[aid_syncn]:[ctag][:];	
Restrictions: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
[aid_syncn]	AID of the NE clock. The value is CLKSRCNT.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-SYNCN:[tid]:[aid_syncn]:[ctag][:] */
   aid_syncn::[syncn_nblk];
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-SYNCN:[tid]:[aid_syncn]:[ctag][:] */
   errcde
;
```

Table 13-6. RTRV-SYNCN Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_syncn	As described for command parameters
syncn_nblk	Named parameter block for SYNCN. The block consists of the parameter PRICREF (primary local refernce source for synchronizing the clock), followed by an equal sign (=) and one of the following values: LOOP = Loop timing recovered form the network-side facility LOCAL = Local oscillator on NT board

Example

Retrieve the configuration of the reference source for synchronization of the NE clock.

```
RTRV-SYNCN:TAMPA:CLKSRCNT:42;

   TAMPA 01-12-20 11:20:34
M  42 COMPLD
   /* RTRV-SYNCN:TAMPA:CLKSRCNT:42 */
   CLKSRCNT::PRICREF=LOCAL;
```

Related Commands

ED-SYNCN on page 13-2

System Commands

14

Overview

This chapter contains the following System commands:

ACT-USER

The ACT-USER command logs a user on and begins a user session.

Table 14-1. ACT-USER Command Parameters

ACT-USER:[tid]:[uid]:[ctag];;pid;	
RESTRICTIONS: All parameters in this command are position-defined. A maximum of four remote (telnet) sessions and one console terminal session may be logged on simultaneously.	
[tid]	The identification of the target NE. TID is optional and has a factory default value of null. The NE's SID code is the only other valid value.
[uid]	The user identification name (10 characters maximum). Input is case-sensitive. Grouping is not allowed.
[ctag]	The correlation tag (6 characters maximum) that links an input command with associated output responses. It is optional with a default of 0.
[pid]	The user identification name (10 characters maximum). Must include at least one letter, one digit, and one nonalphanumeric character. Input is case-sensitive. Grouping is not allowed.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ACT-USER:[tid]:uid:[ctag]::pid */
;
```

NOTE:

In this response, the pid is displayed as a series of asterisks.

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
;
```

Table 14-2. ACT-USER Response Parameters

Parameter	Explanation
sid	Source NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Activate JANET, whose password is ABC-1234.

```
ACT-USER:TAMPA:JANET:1::ABC-1234;


   TAMPA 01-10-25 10:35:34
M  40 COMPLD
   /* ACT-USER:JANET:1::40 ****** */
;
```

Related Command

CANC-USER on page 14-6

ALW-MSG-ALL

The ALW-MSG-ALL command allows all autonomous messages to be reported. This command affects only the issuing user's session. Unreported alarms and events existing at the time of resumption are reported with the REPT-ALM and REPT-EVT commands.

Table 14-3. ALW-MSG-ALL Command Format

ALW-MSG-ALL:[tid]:[aid_all]:[ctag]::[ntfcnde];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a factory default value of null. The NE's SID code is the only other valid value.
[aid_all]	Access Identifier for all entities. The value is ALL.
[ctag]	The correlation tag (6 characters maximum) that links an input command with associated output responses. It is optional with a default of 0.
[ntfcncde]	Notification code for some autonomous messages. Grouping is allowed. If no value is specified, ALL is assumed. Valid values are: CR = Critical alarm MJ = Major alarm MN = Minor alarm NA = Not alarmed

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* ALW-MSG-ALL:[tid]:[aidall]:[ctag]::[ntfcncde] */

;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* ALW-MSG-ALL:[tid]:[aidall]:[ctag]::[ntfcncde] */
   errcde
;
```

Table 14-4. ALW-MSG-ALL Response Parameters

Parameter	Explanation
sid	Source NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Enable the autonomous messages to be reported in the OS.

```
ALW-MSG-ALL:TAMPA:ALL:40::MN;

   TAMPA 01-10-24 12:30:43
M  40 COMPLD
   /* ALW-MSG-ALL:TAMPA:ALL:40::MN  */
;
```

Related Command

INH-MSG-ALL on page 14-9

CANC-USER

The CANC-USER command logs off a user's own session.

Table 14-5. CANC-USER Command Parameters

CANC-USER:[tid]:[uid]:[ctag];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a factory default value of null. The NE's SID code is the only other valid value.
[uid]	The user identification name (10 characters maximum). Input is case-sensitive.
[ctag]	The correlation tag (6 characters maximum) that links an input command with associated output responses. It is optional with a default of 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* CANC-USER:[tid]:[uid]:[ctag] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* CANC-USER:[tid]:[uid]:[ctag] */
   errcde
;
```

Table 14-6. CANC-USER Response Parameters

Parameter	Explanation
sid	Source NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Cancel the user ID JANET.

```
CANC-USER:TAMPA:JANET:40;

   TAMPA 01-10-25 10:35:34
M  40 COMPLD
   /* CANC-USER:TAMPA:JANET:40 */
;
```

Related Command

ACT-USER on page 14-2

DLT-USER-SECU on page 12-2

ED-USER-SECU on page 12-8

ENT-USER-SECU on page 12-10

RTRV-USER-SECU on page 12-14

CPY-FILE

The CPY-FILE command copies the contents of a configuration or software file on a selected equipment module to or from an external file server.

Table 14-7. CPY-FILE Command Parameters

CPY-FILE:[tid]:aid_eqpt:[ctag]::svripaddr[,srcfile] [,destfile],ftype,,,,,[svruid][,svrpid];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
aid_eqpt	Equipment unit access identifier. The access identifier of a unit of equipment with downloadable software or configuration files. Enter aid_equip in the format COM (common equipment system identifier).
[ctag]	The correlation tag that correlates an input command with its associated output response(s). It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.
svripaddr	File Server IP Address. Valid values are: – ddd.ddd.ddd.ddd: IP address (ddd= 0–255) – NONE: No FTP server (default)
srcfile	Source file name (file name and location of the external file server). Name of the source file to be transferred during the software download. This field can include a full path name in addition to the name of the file to be transferred. This field is null (not used) for upload operations.
destfile	Destination file name (file name and location of the external file server) and location for the file to be transferred during the software upload. This field can include a full path name in addition to the name of the file to be transferred. This field is null (not used) for download operations.
ftype	File type. Type of file to be transferred. Valid types are: – SW: Software image. Software images downloaded into the NE will overwrite the one not currently in use. – CNFG: Configuration image. Configuration files downloaded into the NE are applied directly to the active configuration.
[svid]	User name (if needed) to log in to the server. If no value is specified, null is assumed.
svrpid	Password (if needed) to log in to the server. If no value is specified, null is assumed.

INH-MSG-ALL

The INH-MSG-ALL command inhibits the reporting of all autonomous messages at or below a specified severity level. This command affects only the issuing user's session and has no effect on other indicators or on NE operation. The NE continues to respond fully to RTRV-ALM and RTRV-COND commands.

Table 14-8. INH-MSG-ALL Command Format

INH-MSG-ALL:[tid]:[aid_all]:[ctag]::[ntfcnde];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
[aid_all]	Access Identifier for all entities. The value is ALL.
[ctag]	The correlation tag (6 characters maximum) that links an input command with associated output responses. It is optional with a default of 0.
[ntfcncde]	Notification code for some autonomous messages. Grouping is allowed. Valid values are: CR = Critical alarm MJ = Major alarm MN = Minor alarm NA = Not alarmed

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* INH-MSG-ALL:[tid]:[aidall]:[ctag]::[ntfcncde] */

;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* INH-MSG-ALL:[tid]:[aidall]:[ctag]::[ntfcncde] */
   errcde
;
```

Table 14-9. INH-MSG-ALL Response Parameters

Parameter	Explanation
sid	Source NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Inhibit the reporting of Minor and Not Alarmed autonomous messages.

```
INH-MSG-ALL:TAMPA:ALL:40::MN;

   TAMPA 01-06-24 11:30:43
M  40 COMPLD
   /* INH-MSG-ALL:TAMPA:ALL:40::MN  */
;
```

Related Command

ALW-MSG-ALL on page 14-4

INIT-SYS

The INIT-SYS command initializes or resets selected subsystems in the NE.

Table 14-10. INIT-SYS Command Parameters

INIT-SYS:[tid]:aid_proc:[ctag]::init_mode;	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a factory default value of null. The NE's SID code is the only other valid value.
aid_proc	Identifier of the processor to be initialized. The value can be preceded with AID= (not required).Grouping and ranging are not allowed. The only valid value is SYSTEM.
[ctag]	Correlation tag (1–6 characters) that links an input command with associated output responses. The default is 0.
init_mode	Mode of initialization. Valid values are: 1= Initialize with extended self-test. 2 = Initialize with minimum self-test. 3 and 4 are reserved. 20 = Complete reset (all user options are reset to factory defaults).

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* INIT-SYS:[tid]:aid_proc:[ctag]::init_mode */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY

   /* INIT-SYS:[tid]:aid_proc:[ctag]::init_mode */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 14-11. INIT-SYS Response Parameters

Parameter	Explanation
sid	Source NE identification
yy-mm-dd	Year (last two digits), month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Perform a complete reset of the NTA unit.

```
INIT-SYS:TAMPA:NTA:40::3;

   TAMPA 02-03-22 10:30:23
M  40 COMPLD
   /* INIT-SYS:TAMPA:NTA:40::3 */
;
```

Related Commands

None

LOGOFF

The LOGOFF command logs the invoking terminal session.

Table 14-12. LOGOFF Command Parameters

LOGOFF:[tid]::[ctag];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a factory default value of null. The NE's SID code is the only other valid value.
[ctag]	The correlation tag (6 characters maximum) that links an input command with associated output responses. It is optional with a default of 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* LOGOFF:[tid]::[ctag] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* LOGOFF:[tid]::[ctag] */
   errcde
;
```

Table 14-13. LOGOFF Response Parameters

Parameter	Explanation
sid	Source NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Log off the TAMPA NE.

```
LOGOFF:TAMPA::40;

   TAMPA 01-10-25 10:35:34
M  40 COMPLD
   /* LOGOFF:TAMPA::40 */
;
```

Related Command

ACT-USER on page 14-2

RTRV-HDR

The RTRV-HDR command retrieves the NE header information.

Table 14-14. RTRV-HDR Command Parameters

RTRV-HDR:[tid]::[ctag];	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a factory default value of null. The NE's SID code is the only other valid value.
[ctag]	The correlation tag that correlates an input command with its associated output response(s). It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-HDR:[tid]::[ctag] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-HDR:[tid]::[ctag] */
   errcde
;
```

Table 14-15. RTRV-HDR Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year (last two digits), month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Retrieve header information for the TAMPA NE.

```
RTRV-HDR:TAMPA::42;

   TAMPA 01-10-24 11:30:13
M  42 COMPLD
   /* RTRV-HDR:TAMPA::42 */
;
```

Related Commands

None

RTRV-MEM

The RTRV-MEM command retrieves a list of software image files available in the NE, along with the software version associated with each file.

Table 14-16. RTRV-MEM Command Parameters

RTRV-MEM:[tid]:aid_com:[ctag];	
RESTRICTION: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_com	Access Identifier for all common equipment. The value can be preceded with AID=, but this is not required. The value is COM.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-MEM:[tid]:aid_com:[ctag] */
   filename[,filename,...]
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-MEM:[tid]:aid_com:[ctag] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 14-17. RTRV-MEM Response Parameters

Parameter	Explanation
sid	Source NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
filename	Name of a software module

Example

Retrieve the list of software image files for the TAMPA NE.

```
RTRV-MEM:TAMPA:COM:40;

   TAMPA 02-07-24 12:30:43
M  40 COMPLD
   /* RTRV-MEM:TAMPA:COM:40 */
   (filename)

;
```

Related Commands

None

RTRV-META-AID

The RTRV-META-AID command retrieves the Access Identification (AID) of a specific command or the AIDs of all TL1 commands.

Table 14-18. RTRV-META-AID Command Parameters

RTRV-META-AID:[tid]:[aid]:[ctag][:];	
RESTRICTION: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid	The AID value. Valid values are: – NULL: Retrieve aids of all commands – command name: Retrieve aid of that specific command.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-META-AID:[tid]:[aid]:[ctag]; */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-META-AID:[tid]:[aid]:[ctag]; */
   aid:ERRCDE=errcde
   /* error description */
;
```

Example

Retrieve the AID for the RTRV-IPPORT command.

```
RTRV-META-AID:TAMPA:IPPORT:40;

   TAMPA 02-07-24 12:30:43
M  40 COMPLD
   IPPORT:ATM-{1,2}

   IPPORT:ETH-{1},

;
```

Related Commands

None

RTRV-META-CMD

The RTRV-META-CMD command retrieves a specific or a list of all TL1 commands.

Table 14-19. RTRV-META-CMD Command Parameters

RTRV-META-CMD:[tid]:[cmd]:[ctag][:];	
RESTRICTION: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
cmd	The command value. Valid values are: – NULL: Retrieve all commands – command name: Retrieve that specific command.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-META-CMD:[tid]:[cmd]:[ctag]; */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-META-CMD:[tid]:[cmd]:[ctag]; */
   aid:ERRCDE=errcde
   /* error description */
;
```

Example

Retrieve the RTRV-IPPORT command.

```
RTRV-META-CMD:TAMPA:RTRV-IPPORT:40;

   TAMPA 02-07-24 12:30:43
M  40 COMPLD
   RTRV-IPPORT
;
```

Related Commands

None

RTRV-META-SYN

The RTRV-META-SYN command retrieves the syntax of a specific command or the syntax of all TL1 commands.

Table 14-20. RTRV-META-SYN Command Parameters

RTRV-META-SYN:[tid]:[cmd]:[ctag][:];	
RESTRICTION: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
cmd	The command value. Valid values are: – NULL: Retrieve syantax of all commands – command name: Retrieve syntax of that specific command.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-META-SYN:[tid]:[cmd]:[ctag]; */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-META-SYN:[tid]:[cmd]:[ctag]; */
   aid:ERRCDE=errcde
   /* error description */
;
```

Example

Retrieve the syntax for the RTRV-IPPORT command.

```
RTRV-META-SYN:TAMPA:RTRV-IPPORT:40;

   TAMPA 02-07-24 12:30:43
M  40 COMPLD

"RTRV-IPPORT:RTRV-IPPORT:[tid]:aid_ipport;[ctag}::[skipped]:
[skipped]:[pstf]"
;
```

Related Commands

None

RTRV-NE-ALL

The RTRV-NE-ALL command retrieves common configuration data associated with the NE.

Table 14-21. RTRV-NE-ALL Command Parameters

RTRV-NE-ALL:[tid]:[aid_com]:[ctag][:];	
RESTRICTION: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
[aid_com]	Access Identifier for all common equipment. The value can be preceded with AID=, but this is not required. The value is COM.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RTRV-NE-ALL:[tid]:[aid_com]:[ctag][:] */
   aid_com::ne_nblk
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RTRV-NE-ALL:[tid]:[aid_com]:[ctag][:] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 14-22. RTRV-NE-ALL Response Parameters (1 of 3)

Parameter	Explanation
sid	Source NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_com	As described for command parameters (see Table 14-21, RTRV-NE-ALL Command Parameters).
ne_nblk	Named parameter block for NE. The block consists of one or more of the following parameters, each followed by an equal sign and a value. BOOTPVCI : ATM VCI of the PVC over which the NE issues BOOTP requests for ATM-1 (32–65535). BOOTPVPI: ATM VPI of the PVC over which the NE issues BOOTP requests for ATM-1 (0–4095) MEMALM: Status of alarm condition indicating loss or corruption of persistent memory. Values are: – ACTIVE: Persistent memory lost or corrupted – CLEAR: Persistent memory OK DEFROUTER: IP address of default IP router. Values are: – ddd.ddd.ddd.ddd: IP address (ddd = 1–255) – NONE: No default IP router is used NETPOS: Position of the NE in the access subnetwork. Value is HUB (NE is directly connected to the network). SNTP: Use of Simple Network Time Protocol to maintain NE clock. Values are: – ENABLED: Use SNTP – DISABLED: Use NE local time set by the **SET-DAT** command TZOFFSET: Offset of local time zone from GMT/UTC, in minutes (-780–780). Used by the system if SNTP is enabled. MEMDNLD: Whether external download of a system persistent database is enabled. Value is ENABLED (download allowed).

Table 14-22. RTRV-NE-ALL Response Parameters (2 of 3)

Parameter	Explanation
ne_nblk *(continued)*	SNTPIPADDR: Simple Network Timing Protocol Server IP Address. Specifies the IP address of specific SNTP server to poll for time and synchronization. If a server address is specified and SNTPMODE is UNI, SNTP will operate in Unicast mode. If a server address is not specified and SNTPMODE is UNI, the NE will operate in Multicast mode regardless of the SNTPMODE. If no value is specified, this parameter remains the same. Valid values are: – ddd.ddd.ddd.ddd: IP address (ddd = 0–255) – NONE: No server is specified SNTPMODE: The SNTP mode. Valid values are: – MULTI: Multicast (default) – BROAD: Broadcast – UNI: Unicast (to server at SNTPIPADDR) RMTSYSLOG: Remote syslog. Enables or disables syslog messages going to a remote daemon. If no value is specified, this parameter remains the same. Valid values are: – ENABLED: Send messages to a remote syslog daemon. – DISABLED: Do not send messages to a remote syslog daemon. SYSLOGIPADDR: Syslog server IP address. Specifies the IP address of a remote syslog server if RMTSYSLOG is enabled. If no value is specified, this parameter remains the same. Valid values are: – ddd.ddd.ddd.ddd: IP address (ddd = 0–255) – NONE: No server is specified SYSLOGPORT: Syslog UDP port. Specifies the destination UDP port number used to send syslog messages to a remote syslog server if RMTSYSLOG is enabled (0–65535). If no value is specified, this parameter remains the same. SYSLOGSEVTHLD: Syslog severity threshold. Specifies the minimum severity level of messages logged to the syslog. If no value is specified, this parameter remains the same. Valid values are: – EMERG: Emergency. System is unusable. – ALERT: Action must be taken immediately (unused). – CRITICAL: Critical and major alarm conditions. – ERROR: Minor alarms and autonomous message classification alarms. – WARNING: Warning conditions (unused). – NOTICE: Normal but significant conditions (unused). – INFO: Informational messages related to operational task status such as download successful, configuration change notification, and test start/stop. SYSLOGRTLMT: Syslog rate limiting. Enables or disables syslog rate limiting. If no value is specified, this parameter remains the same. Valid values are: – ENABLED: The same syslog message will not be relogged within a 5-minute period. – DISABLED: Rate limiting of syslog messages will not be performed.

Table 14-22. RTRV-NE-ALL Response Parameters (3 of 3)

Parameter	Explanation
ne_nblk *(continued)*	SPECMGMT: Spectrum management. Enables or disabled spectrum management support. When enabled, the maximum transmit speeds and maximum transmit power are limited to meet local spectrum management guidelines. If no value is specified, this parameter remains the same. Valid values are: – ENABLED: Spectrum management guidelines are enforced on the NE. – DISABLED: Spectrum management guidelines are not enforced on the NE. TSTTMOUT: Test timeout. Specifies the amount of time a test will be allowed to run before automatic termination (0–99 minutes, where 0 disables automatic timeout). If no value is specified, this parameter remains the same.

Example

Retrieve the common configuration data associated with the TAMPA NE.

```
RTRV-NE-ALL:TAMPA:COM:40;

   TAMPA 02-06-24 12:30:43
M  40 COMPLD
   /* RTRV-NE-ALL:TAMPA:COM:40 */
   COM:BOOTPVPI=0,BOOTPVCI=32
;
```

Related Command

SET-NE-ALL on page 14-31

SET-DAT

The SET-DAT command sets the date and time in an NE.

Table 14-23. SET-DAT Command Parameters

SET-DAT:[tid]::[ctag]::date,time;	
RESTRICTIONS: All parameters in this command are position-defined. Resetting the unit will also reset the date and time.	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
[ctag]	The correlation tag that correlates an input command with its associated output response(s). It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.
date	Date in the format mm-dd-yy: Where: – mm = 1–12 – dd = 1–31 – yy = 0–99
time	Time in the format hh-mm-ss: Where: – hh = 0–23 – mm = 0–59 – ss = 0–59

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* SET-DAT:[tid]::[ctag]::date,time */;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* SET-DAT:[tid]::[ctag]::date,time */;
   errcde
;
```

Table 14-24. SET-DAT Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Set the date to 20 October 2001 and the time to 11:13:35 in the TAMPA NE.

```
SET-DAT:TAMPA::42::10-20-01,11-13-35;
```

```
   TAMPA 01-10-20 11:13:35
M  42 COMPLD
   /* SET-DAT:TAMPA::42::10-20-01,11-13-35  */
;
```

Related Commands

None

SET-NE-ALL

The SET-NE-ALL command sets common configuration parameters associated with the NE.

Table 14-25. SET-NE-ALL Command Parameters (1 of 2)

SET-NE-ALL:[tid]:[aid_com]:[ctag]:::ne_nblk;	
RESTRICTION: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
[aid_com]	Access Identifier for all common equipment. The value can be preceded with AID=, but this is not required. The value is COM.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
ne_nblk	Named parameter block for NE. The block consists of one or more of the following parameters, each followed by an equal sign and a value. If not specified, the values of these parameters remain unchanged. BOOTPVCI : ATM VCI of the PVC over which the NE issues BOOTP requests (32–1023) for ATM-1. The default value is 32. BOOTPVPI: ATM VPI of the PVC over which the NE issues BOOTP requests (0–15) for ATM-1. The default value is 0. MEMALM: Used to clear alarm condition indicating loss or corruption of persistent memory. The only valid value is CLEAR. MEMDNLD: Determines whether an external download is persistent in the database (typically used to restore the database from the previous backup version). The only valid value is ENABLED. DEFROUTER: IP address of default IP router. Values are: – ddd.ddd.ddd.ddd: IP address (ddd = 1–255) – NONE: No default IP router is used (default) NETPOS: Position of the NE in the access subnetwork. Value is HUB (NE is directly connected to the network). SNTP: Use of Simple Network Time Protocol to maintain NE clock. Values are: – ENABLED: Use SNTP – DISABLED: Use NE local time set by the command **SET-DAT** on page 14-29. TZOFFSET: Offset of local time zone from GMT/UTC, in minutes (-780–780). The default is 0 minutes. Used by the system if SNTP is enabled. SNTPMODE: The SNTP mode. Valid values are: – MULTI: Multicast (default) – BROAD: Broadcast – UNI: Unicast (to server at SNTPIPADDR)

Table 14-25. SET-NE-ALL Command Parameters (2 of 2)

SET-NE-ALL:[tid]:[aid_com]:[ctag]:::ne_nblk;	
ne_nblk	RMTSYSLOG: Remote syslog. Enables or disables syslog messages to a remote daemon. The default is Disabled. SYSLOGIPADDR: Syslog server IP address. Specifies the IP address of a remote syslog server if RMTSYSLOG is enabled. Valid values are: – ddd.ddd.ddd.ddd: IP address (ddd = 0–255) – NONE: No server is specified SYSLOGPORT: Syslog UDP port. Specifies the destination UDP port number used to send syslog messages to a remote syslog server if RMTSYSLOG is enabled (0–65535). SYSLOGSEVTHLD: Syslog severity threshold. Specifies the minimum severity level of messages logged to the syslog. Valid values are: – EMERG: Emergency. System is unusable. – ALERT: Action must be taken immediately (unused). – CRITICAL: Critical and major alarm conditions. – ERROR: Minor alarms and autonomous message classification alarms. – WARNING: Warning conditions (unused). – NOTICE: Normal but significant conditions (unused). – INFO: Informational messages related to operational task status such as download successful, configuration change notification, and test start/stop. SYSLOGRTLMT: Syslog rate limiting. Enables or disables syslog rate limiting. Valid values are: – ENABLED: The same syslog message will not be relogged within a 5-minute period. – DISABLED: Rate limiting of syslog messages will not be performed. SPECMGMT: Spectrum management. Enables or disabled spectrum management support. When enabled, the maximum transmit speeds and maximum transmit power are limited to meet local spectrum management guidelines. Valid values are: – ENABLED: Spectrum management guidelines are enforced on the NE. – DISABLED: Spectrum management guidelines are not enforced on the NE. TSTTMOUT: Test timeout. Specifies the amount of time a test will be allowed to run before automatic termination (0–99 minutes, where 0 disables automatic timeout)

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* SET-NE-ALL:[tid]:[aid_com]:[ctag]:::ne_nblk */
   aid_com::ne_nblk
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* SET-NE-ALL:[tid]:[aid_com]:[ctag]:::ne_nblk */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 14-26. SET-NE-ALL Response Parameters

Parameter	Explanation
sid	Source NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Retrieve the common configuration parameters associated with the TAMPA NE.

```
SET-NE-ALL:TAMPA:COM:40:::BOOTPVPI=1023,BOOTPVCI=15,
MEMALM=CLEAR,SNTP=DISABLED;

   TAMPA 02-06-24 12:30:43
M  40 COMPLD
   /* SET-NE-ALL:TAMPA:COM:40 :::BOOTPVPI=1023,BOOTPVCI=15,
MEMALM=CLEAR,SNTP=DISABLED*/
;
```

Related Command

RTRV-NE-ALL on page 14-25

SET-SID

The SET-SID command sets the system identifier (SID) of a network element.

Table 14-27. SET-SID Command Parameters

SET-SID:[tid]::[ctag]::sid;	
RESTRICTIONS: All parameters in this command are position-defined.	
[tid]	The identification of the target NE. TID is optional and has a default value of null. The NE's SID code is the only other valid value.
[ctag]	The correlation tag that correlates an input command with its associated output response(s). It is assigned by the originator of the command. The value is limited to six characters, which may be an identifier or a decimal numeral. It is optional with a default of 0.
sid	System identifier. A text string of up to 16 characters that uniquely identifies the NE.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response will be sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* SET-SID:[tid]::[ctag]::sid */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* SET-SID:[tid]::[ctag]::sid */;
   errcde
;
```

Table 14-28. SET-SID Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Set the SID for the TAMPA NE to "TAMPA-FL".

```
SET-SID:TAMPA::42::TAMPA-FL;

   TAMPA 02-04-20 11:13:35
M  42 COMPLD
   /* SET-SID:TAMPA::42::TAMPA-FL */
;
```

Related Commands

None

Test Commands

15

Overview

This chapter contains the following Test commands:

OPR-LPBK-T1

The OPR-LPBK-T1command places a specific T1 facility in loopback mode.

Table 15-1. OPR-LPBK-T1 Command Parameters

OPR-LPBK-T1:[tid]:aid_ds1:[ctag]::,,,[lbktype];	
RESTRICTIONS: ■ All parameters in this command are position-defined. ■ Loopbacks are supported for the near end (NEND) of the facility only. ■ Loopbacks configured with this command are subject to the overall system test timeout. ■ The near end of the facility can also be placed in loopback by sending DS1 in-band loopback control codes. ■ Only one loopback at a time is allowed on a facility.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_ds1	Access Identifier for the T1 facility. The value can be preceded with AID=, but this is not required. Enter in any of the following formats, replacing lower-case parameters with the values given: NTT1-circuit – circuit: DS1 circuit on the NT (1)
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
[lpbktype]	Type of loopback. Valid values are: LINE: Loopback facility at the physical line level toward the facility (default) PAYLOAD: Loopback facility data (payload) toward the facility

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* OPR-LPBK-T1:[tid]:aid_ds1:[ctag]::,,,[lpbktype] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* OPR-LPBK-T1:[tid]:aid_ds1:[ctag]::,,,[lpbktype] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 15-2. OPR-LPBK-T1 Response Parameters

Parameter	Explanation
sid	Source NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Place NTT1 circuit 1 in payload loopback mode.

```
OPR-LPBK-T1:TAMPA:NTT1-1:40::,,,PAYLOAD;
```

```
   TAMPA 01-11-24 12:30:43
M  40 COMPLD
   /* OPR-LPBK-T1:TAMPA:NTT1-1:40::,,,PAYLOAD */
;
```

Related Command

RLS-LPBK-T1 on page 15-7

OPR-LPBK-VCL

The OPR-LPBK-VCL command places a specific Virtual Channel Link (VCL) in loopback mode.

Table 15-3. OPR-LPBK-VCL Command Parameters

OPR-LPBK-VCL:[tid]:aid_vcl:[ctag]:[locn],[orgn] [lpbktype];	
RESTRICTIONS: ■ All parameters in this command are position-defined. ■ Only one loopback at a time is allowed on a facility.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_vcl	Virtual channel identifier for OAM loopbacks. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: NTVCL-vpi-vci: VCL for NT circuit LTVCL-rack-shelf-slot-circuit-vpi-vci: VCL for LT circuit – rack: rack number (1) – shelf: shelf number (1) – slot: LT slot number (1) – circuit: ADSL circuit on the LT (1–24) – vpi: Virtual Path Identifier – vci: Virtual Channel Identifier – segment: ATM location identifier. A 32-character hexadecimal field that identifies the intermediate point responsible for looping back F5 OAM segment loopback cells. If absent, the loopback is performed at the end of the segment connection. Not accepted for lpbktype E2E. Optional for lpbktype SEG.
[locn]	Facility location. Valid values are: FEND (far end): This is the default. FEND_segment
[orgn]	Source of the signal to be looped back. The only valid value is NEND (near end).
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.
[lpbktype]	Loopback type. Valid values are: E2E: End-to-End loopback. Identifies an OAM loopback test on a VCL or VCC termination point using an end-to-end OAM cell. SEG: Segment loopback. Identifies an OAM loopback test on a VCL or VCC termination point using a segment OAM cell (default).

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* OPR-LPBK-VCL:[tid]:lpbk_vcl:[ctag]::[locn],[orgn] */
   "aid_vcl:op_vcl,value"
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* OPR-LPBK-VCL:[tid]:lpbk_vcl:[ctag]::[locn],[orgn] */
   "aid:ERRCDE=errcde"
   /* error description */
;
```

Table 15-4. OPR-LPBK-VCL Response Parameters

Parameter	Explanation
tid	Target NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Place rack 2, shelf 3, slot 5, circuit 1, virtual path LTVCL-7, virtual channel 99 in loopback mode, with network VC cells looped back to the network at the LT.

```
OPR-LPBK-VCL:TAMPA:LTVCL-2-3-5-1-LTVCL-7-99:40::FEND,NEND;

   TAMPA 01-10-24 12:30:43
M  42 COMPLD
   /*
OPR-LPBK-VCL:TAMPA:LTVCL-2-3-5-1-LTVCL-7-99:40::FEND,NEND */
;
```

Related Commands

RLS-LPBK-VCL on page 15-9

RLS-LPBK-T1

The RLS-LPBK-T1 command releases any loopback currently active at the near end of a specific T1 facility, including configured loopbacks (set with the command **OPR-LPBK-T1** on page 15-2) and inband loopbacks (set with DS1 inband loopback codes).

Table 15-5. RLS-LPBK-T1 Command Parameters

RLS-LPBK-T1:[tid]:aid_ds1:[ctag][:];	
RESTRICTIONS: ■ All parameters in this command are position-defined. ■ Port loopbacks are supported only on LT ports.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_ds1	Access Identifier for the T1 facility. The value can be preceded with AID=, but this is not required. Enter in the following format, replacing lower-case parameters with the values given: NTT1-circuit – circuit: DS1 circuit on the NT (1)
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RLS-LPBK-T1:[tid]:aid_ds1:[ctag][:] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RLS-LPBK-T1:[tid]:aid_ds1:[ctag][:] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 15-6. RLS-LPBK-T1 Response Parameters

Parameter	Explanation
sid	Source NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Release the NTT1 circuit 1 from payload loopback mode.

```
RLS-LPBK-T1:TAMPA:NTT1-1:40;

   TAMPA 01-11-24 12:30:43
M  40 COMPLD
   /* RLS-LPBK-T1:TAMPA:NTT1-1:40 */
;
```

Related Command

OPR-LPBK-T1 on page 15-2

RLS-LPBK-VCL

The RLS-LPBK-VCL command releases any loopback currently active on the selected ATM VCL.

Table 15-7. RLS-LPBK-VCL Command Parameters

RLS-LPBK-VCL:[tid]:aid_vcl:[ctag][:];	
RESTRICTION: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_vcl	Access identifier for the ATM virtual channel. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: NTVCL-rack-shelf-slot-circuit-vpi-vci: VCL for NT circuit LTVCL-rack-shelf-slot-circuit-vpi-vci: VCL for LT circuit – rack: rack number (1) – shelf: shelf number (1) – slot: LT slot number (1) – circuit: ADSL circuit on the NT/circuit on the LT (1) – vpi: Virtual Path Identifier – vci: Virtual Channel Identifier
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* RLS-LPBK-VCL:[tid]:aid_vcl:[ctag][:] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* RLS-LPBK-VCL:[tid]:aid_vcl:[ctag][:] */
   aid:ERRCDE=errcde
   /* error description */
;
```

Table 15-8. RLS-LPBK-VCL Response Parameters

Parameter	Explanation
sid	Source NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)

Example

Release rack 2, shelf 3, slot 5, circuit 1, virtual path LTVCL-7, virtual channel 99 from loopback mode.

```
RLS-LPBK-VCL:TAMPA:LTVCL-2-3-5-1-LTVCL-7-99:40;

   TAMPA 01-11-24 12:30:43
M  40 COMPLD
   /* RLS-LPBK-VCL:TAMPA:LTVCL-2-3-5-1-LTVCL-7-99:40 */
;
```

Related Command

OPR-LPBK-VCL on page 15-4

STA-LAMPTST

The STA-LAMPTST command starts a lamp (LED) test on the NE.

Table 15-9. STA-LAMPTST Command Parameters

STA-LAMPTST:[tid]:aid_eqpt:[ctag];	
RESTRICTION: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_eqpt	Equipment access identifier. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: COM: Common equipment system identifier. Grouping and ranging are not allowed.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* STA-LAMPTST:[tid]:aid_eqpt:[ctag][:] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* STA-LAMPTST:[tid]:aid_eqpt:[ctag][:] */
   aid_eqpt:ERRCDE=errcde
   /* error description */

;
```

Table 15-10. STA-LAMPTST Response Parameters

Parameter	Explanation
sid	Source NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_eqpt	Equipment access identifier. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: COM: Common equipment system identifier. Grouping and ranging are not allowed.

Example

Start a lamp test on the TAMPA device.

```
STA-LAMPTST:TAMPA:COM;

   TAMPA 01-11-24 12:30:43
M  40 COMPLD
   /* STA-LAMPTST:TAMPA:COM */
;
```

Related Command

STP-LAMPTST on page 15-13

STP-LAMPTST

The STP-LAMPTST command stops a lamp (LED) test on a device.

Table 15-11. STP-LAMPTST Command Parameters

STP-LAMPTST:[tid]:aid_eqpt:[ctag];	
RESTRICTION: All parameters in this command are position-defined.	
[tid]	Identification of the target NE. The default value is null. The NE SID code is the only other valid value.
aid_eqpt	Equipment access identifier. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: COM: Common equipment system identifier. Grouping and ranging are not allowed.
[ctag]	Correlation tag (6 characters maximum) that links an input command with associated output responses. The default is 0.

Response Format

If, in less than 2 seconds, a normal or error response cannot be sent, the following acknowledgment response is sent:

```
   IP c
```

After the above response, a new command input may be generated.

Normal Response:

```
   sid yy-mm-dd hh:mm:ss
M  c COMPLD
   /* STP-LAMPTST:[tid]:aid_eqpt:[ctag][:] */
;
```

Error Response:

```
   sid yy-mm-dd hh:mm:ss
M  c  DENY
   /* STP-LAMPTST:[tid]:aid_eqpt:[ctag][:] */
   aid_eqpt:ERRCDE=errcde
   /* error description */

;
```

Table 15-12. STP-LAMPTST Response Parameters

Parameter	Explanation
sid	Source NE identification
yy-mm-dd	Year, month, and day
hh:mm:ss	Hour, minute, and second
M	Message generated in response to an input command
c	If provided, ctag; otherwise 0
COMPLD	Completed
DENY	Input command is denied
/* */	Enclosed are human readable comments – unspecified format
errcde	Error code (see Appendix A, *Error Codes*)
aid_eqpt	Equipment access identifier. The value can be preceded with AID=, but this is not required. Grouping and ranging are allowed. Enter in the following format, replacing lower-case parameters with the values given: COM: Common equipment system identifier. Grouping and ranging are not allowed.

Example

Stop a lamp test on the TAMPA device.

```
STP-LAMPTST:TAMPA:COM;

   TAMPA 01-11-24 12:30:43
M  40 COMPLD
   /* STP-LAMPTST:TAMPA:COM */
;
```

Related Command

STA-LAMPTST on page 15-11

Error Codes

A

Overview

An error code is 4-character code that can appear in the response of an input command describing why the command cannot be executed. Error codes are grouped into the following types:

- Equipment (E)
- Input (I)
- Multiple errors (M)
- Privilege (P)
- Status (S)

Table A-1. Error Code Descriptions (1 of 2)

Error Code	Type	Description
ENDS	E	Not equipped with duplex switching
EQWT	E	Wrong equipment type
ICNC	I	Command not consistent
IDNC	I	Data not consistent
IDNV	I	Data not valid
IEAE	I	Entity already exists
IENE	I	Entity does not exist
IPEX	I	Extra input parameter
IPMS	I	Parameter missing
IPNC	I	Parameter not consistent
IPNV	I	Parameter not valid
SARB	S	All system resources busy
SDNA	S	Duplex unit not available
SDNC	S	Data not consistent
SNVS	S	Not in valid state

Table A-1. Error Code Descriptions (2 of 2)

Error Code	Type	Description
SROF	S	Requested operation failed
SSRE	S	System resources exceeded
SSTP	S	Command execution stopped

Command Cross Reference

B

Overview

This appendix lists all commands in alphabetical order for easy reference.

ACT Commands

Activate (ACT) commands activate a network element or a user.

Table B-1. ACT Command

Command	See . . .
ACT-USER	**ACT-USER** on page 14-2 in Chapter 14, *System Commands*
ACT-PROFILE-ADSL	**ACT-PROFILE-ADSL** on page 3-2 in Chapter 3, *ADSL Facility Commands*
ACT-PROFILE-ADSLALM	**ACT-PROFILE-ADSLALM** on page 3-4 in Chapter 3, *ADSL Facility Commands*

ALW Commands

Allow (ALW) commands enable automatic operation.

Table B-2. ALW Commands

Command	See . . .
ALW-MSG-ALL	**ALW-MSG-ALL** on page 14-4 in Chapter 14, *System Commands*

CANC Commands

Cancel (CANC) commands cancel/terminate.

Table B-3. CANC Commands

Command	See . . .
CANC-USER	**CANC-USER** on page 14-6 in Chapter 14, *System Commands*

CPY Commands

Copy (CPY) commands copy.

Table B-4. CPY Commands

Command	See . . .
CPY-FILE	**CPY-FILE** on page 14-8 in Chapter 14, *System Commands*

DLT Commands

Delete (DLT) commands remove or unassign.

Table B-5. DLT Commands

Command	See . . .
DLT-ATMARPENT	**DLT-ATMARPENT** on page 8-2 in Chapter 8, *IP Access Commands*
DLT-CRS-VC	**DLT-CRS-VC** on page 6-2 in Chapter 6, *Cross Connect Commands*
DLT-PROFILE-ADSL	**DLT-PROFILE-ADSL** on page 3-6 in Chapter 3, *ADSL Facility Commands*
DLT-PROFILE-ADSLAM	**DLT-PROFILE-ADSLALM** on page 3-8 in Chapter 3, *ADSL Facility Commands*
DLT-IPPORT	**DLT-IPPORT** on page 8-4 in Chapter 8, *IP Access Commands*
DLT-PROFILE-TRAFDSC	**DLT-PROFILE-TRAFDSC** on page 5-2 in Chapter 5, *ATM Commands*
DLT-USER-SECU	**DLT-USER-SECU** on page 12-2 in Chapter 12, *Security Commands*
DLT-VCL	**DLT-VCL** on page 5-4 in Chapter 5, *ATM Commands*

ED Commands

Edit (ED) commands change configuration data.

Table B-6. ED Commands (1 of 2)

Command	See . . .
ED-ADSL	**ED-ADSL** on page 3-10 in Chapter 3, *ADSL Facility Commands*
ED-ATMPORT	**ED-ATMPORT** on page 5-6 in Chapter 5, *ATM Commands*
ED-CID-SECU	**ED-CID-SECU** on page 12-4 in Chapter 12, *Security Commands*
ED-CRS-VC	**ED-CRS-VC** on page 6-4 in Chapter 6, *Cross Connect Commands*
ED-EQPT	**ED-EQPT** on page 7-2 in Chapter 7, *Equipment Commands*
ED-IPPORT	**ED-IPPORT** on page 8-6 in Chapter 8, *IP Access Commands*
ED-PID	**ED-PID** on page 12-6 in Chapter 12, *Security Commands*
ED-PROFILE-ADSLDN	**ED-PROFILE-ADSLDN** on page 3-14 in Chapter 3, *ADSL Facility Commands*

Table B-6. ED Commands (2 of 2)

Command	See . . .
ED-PROFILE-ADSLDNALM	**ED-PROFILE-ADSLDNALM** on page 3-16 in Chapter 3, *ADSL Facility Commands*
ED-PROFILE-ADSLUP	**ED-PROFILE-ADSLUP** on page 3-19 in Chapter 3, *ADSL Facility Commands*
ED-PROFILE-ADSLUPALM	**ED-PROFILE-ADSLUPALM** on page 3-21 in Chapter 3, *ADSL Facility Commands*
ED-PROFILE-ADSLDNALM	**ED-PROFILE-ADSLDNALM** on page 3-16 in Chapter 3, *ADSL Facility Commands*
ED-SYNCN	**ED-SYNCN** on page 13-2 in Chapter 13, *Synchronization Commands*
ED-T1	**ED-T1** on page 4-2 in Chapter 4, *DS1 Facility Commands*
ED-USER-SECU	**ED-USER-SECU** on page 12-8 in Chapter 12, *Security Commands*

ENT Commands

Enter (ENT) commands add new data records.

Table B-7. ENT Commands

Command	See . . .
ENT-ATMARPENT	**ENT-ATMARPENT** on page 8-9 in Chapter 8, *IP Access Commands*
ENT-CRS-VC	**ENT-CRS-VC** on page 6-7 in Chapter 6, *Cross Connect Commands*
ED-EQPT	**ED-EQPT** on page 7-2 in Chapter 7, *Equipment Commands*
ENT-IPPORT	**ENT-IPPORT** on page 8-11 in Chapter 8, *IP Access Commands*
ENT-PROFILE-ADSL	**ENT-PROFILE-ADSL** on page 3-24 in Chapter 3, *ADSL Facility Commands*
ENT-PROFILE-ADSLALM	**ENT-PROFILE-ADSLALM** on page 3-26 in Chapter 3, *ADSL Facility Commands*
ENT-PROFILE-TRAFDSC	**ENT-PROFILE-TRAFDSC** on page 5-8 in Chapter 5, *ATM Commands*
ENT-T1	**ENT-T1** on page 4-5 in Chapter 4, *DS1 Facility Commands*
ENT-USER-SECU	**ENT-USER-SECU** on page 12-10 in Chapter 12, *Security Commands*
ENT-VCL	**ENT-VCL** on page 5-10 in Chapter 5, *ATM Commands*

INH Commands

Inhibit (INH) commands disable an automatic operation.

Table B-8. INH Commands

Command	See . . .
INH-MSG-ALL	**INH-MSG-ALL** on page 14-9 in Chapter 14, *System Commands*

INIT Commands

Initialize (INIT) commands initialize an entry or system.

Table B-9. INIT Commands

Command	See . . .
INIT-LOG	**INIT-LOG** on page 11-2 in Chapter 11, *Log Commands*
INIT-SYS	**INIT-SYS** on page 14-11 in Chapter 14, *System Commands*

LOGOFF Commands

The logoff command logs off the invoking terminal session.

Table B-10. LOGOFF Commands

Command	See . . .
LOGOFF	**LOGOFF** on page 14-13 in Chapter 14, *System Commands*

OPR Commands

Operate (OPR) commands operate or activate a function.

Table B-11. OPR Commands

Command	See . . .
OPR-LPBK-T1	**OPR-LPBK-T1** on page 15-2 in Chapter 15, *Test Commands*
OPR-LPBK-VCL	**OPR-LPBK-VCL** on page 15-4 in Chapter 15, *Test Commands*

RD Commands

Read (RD) commands retrieve data from the NE.

Table B-12. RD Commands

Command	See . . .
RD-SYNCN	**RD-SYNCN** on page 13-4 in Chapter 13, *Synchronization Commands*

REPT Commands

Report (REPT) commands report current operational parameters.

Table B-13. REPT Commands

Command	See . . .
REPT-ALM-ADSL	**REPT ALM ADSL** on page 3-28 in Chapter 3, *ADSL Facility Commands*
REPT-ALM-EQPT	**REPT ALM EQPT** on page 7-4 in Chapter 7, *Equipment Commands*
REPT-ALM-T1	**REPT ALM T1** on page 4-8 in Chapter 4, *DS1 Facility Commands*
REPT-EVT-ADSL	**REPT EVT ADSL** on page 3-30 in Chapter 3, *ADSL Facility Commands*
REPT-EVT-EQPT	**REPT EVT EQPT** on page 7-5 in Chapter 7, *Equipment Commands*
REPT-EVT-T1	**REPT EVT T1** on page 4-9 in Chapter 4, *DS1 Facility Commands*
REPT-OPSTAT-ADSLCOM	**REPT-OPSTAT-ADSLCOM** on page 9-2 in Chapter 9, *Performance Commands*
REPT-OPSTAT-ADSLDN	**REPT-OPSTAT-ADSLDN** on page 9-5 in Chapter 9, *Performance Commands*
REPT-OPSTAT-ADSLUP	**REPT-OPSTAT-ADSLUP** on page 9-7 in Chapter 9, *Performance Commands*
REPT-OPSTAT-IPPORT	**REPT-OPSTAT-IPPORT** on page 8-14 in Chapter 8, *IP Access Commands*
REPT-OPSTAT-T1	**REPT-OPSTAT-T1** on page 4-10 in Chapter 4, *DS1 Facility Commands*
REPT-OPSTAT-VCL	**REPT-OPSTAT-VCL** on page 9-10 in Chapter 9, *Performance Commands*

RTRV Commands

Retrieve (RTRV) commands retrieve data from the NE.

Table B-14. RTRV Commands (1 of 3)

Command	See . . .
RTRV-ADSL	**RTRV-ADSL** on page 3-32 in Chapter 3, *ADSL Facility Commands*
RTRV-ALM-ALL	**RTRV-ALM-ALL** on page 10-5 in Chapter 10, *Fault Commands*
RTRV-ALM-ADSL	**RTRV-ALM-ADSL** on page 10-2 in Chapter 10, *Fault Commands*
RTRV-ALM-EQPT	**RTRV-ALM-EQPT** on page 10-9 in Chapter 10, *Fault Commands*
RTRV-ALM-T1	**RTRV-ALM-T1** on page 10-12 in Chapter 10, *Fault Commands*
RTRV-ATMARPENT	**RTRV-ATMARPENT** on page 8-17 in Chapter 8, *IP Access Commands*
RTRV-ATMPORT	**RTRV-ATMPORT** on page 5-13 in Chapter 5, *ATM Commands*
RTRV-ATTR-ADSL	**RTRV-ATTR-ADSL** on page 10-15 in Chapter 10, *Fault Commands*
RTRV-ATTR-ALL	**RTRV-ATTR-ALL** on page 10-18 in Chapter 10, *Fault Commands*
RTRV-ATTR-EQPT	**RTRV-ATTR-EQPT** on page 10-22 in Chapter 10, *Fault Commands*
RTRV-ATTR-T1	**RTRV-ATTR-T1** on page 10-25 in Chapter 10, *Fault Commands*
RTRV-ATUR	**RTRV-ATUR** on page 3-35 in Chapter 3, *ADSL Facility Commands*
RTRV-CID-SECU	**RTRV-CID-SECU** on page 12-12 in Chapter 12, *Security Commands*
RTRV-COND-ADSL	**RTRV-COND-ADSL** on page 10-28 in Chapter 10, *Fault Commands*
RTRV-COND-ALL	**RTRV-COND-ALL** on page 10-31 in Chapter 10, *Fault Commands*
RTRV-COND-EQPT	**RTRV-COND-EQPT** on page 10-35 in Chapter 10, *Fault Commands*
RTRV-COND-T1	**RTRV-COND-T1** on page 10-38 in Chapter 10, *Fault Commands*
RTRV-CRS-VC	**RTRV-CRS-VC** on page 6-10 in Chapter 6, *Cross Connect Commands*
RTRV-EQPT	**RTRV-EQPT** on page 7-6 in Chapter 7, *Equipment Commands* on page 7-6

Table B-14. RTRV Commands (2 of 3)

Command	See . . .
RTRV-HDR	**RTRV-HDR** on page 14-15 in Chapter 14, *System Commands*
RTRV-INV-EQPT	**RTRV-INV-EQPT** on page 7-9 in Chapter 7, *Equipment Commands*
RTRV-IPPORT	**RTRV-IPPORT** on page 8-19 in Chapter 8, *IP Access Commands*
RTRV-LOG	**RTRV-LOG** on page 11-4 in Chapter 11, *Log Commands*
RTRV-MEM	**RTRV-MEM** on page 14-17 in Chapter 14, *System Commands*
RTRV-META-AID	**RTRV-META-AID** on page 14-19 in Chapter 14, *System Commands*
RTRV-META-CMD	**RTRV-META-CMD** on page 14-21 in Chapter 14, *System Commands*
RTRV-META-SYN	**RTRV-META-SYN** on page 14-23 in Chapter 14, *System Commands*
RTRV-NE-ALL	**RTRV-NE-ALL** on page 14-25 in Chapter 14, *System Commands*
RTRV-PM-ADSL	**RTRV-PM-ADSL** on page 3-37 in Chapter 3, *ADSL Facility Commands*
RTRV-PM-T1	**RTRV-PM-T1** on page 4-12 in Chapter 4, *DS1 Facility Commands*
RTRV-PROFILE-ADSL	**RTRV-PROFILE-ADSL** on page 3-40 in Chapter 3, *ADSL Facility Commands*
RTRV-PROFILE-ADSLALM	**RTRV-PROFILE-ADSLALM** on page 3-42 in Chapter 3, *ADSL Facility Commands*
RTRV-PROFILE-ADSLDN	**RTRV-PROFILE-ADSLDN** on page 3-44 in Chapter 3, *ADSL Facility Commands*
RTRV-PROFILE-ADSLDN ALM	**RTRV-PROFILE-ADSLDNALM** on page 3-47 in Chapter 3, *ADSL Facility Commands*
RTRV-PROFILE-ADSLUP	**RTRV-PROFILE-ADSLUP** on page 3-50 in Chapter 3, *ADSL Facility Commands*
RTRV-PROFILE-ADSLUP ALM	**RTRV-PROFILE-ADSLUPALM** on page 3-53 in Chapter 3, *ADSL Facility Commands*
RTRV-PROFILE-ATMACC	**RTRV-PROFILE-ATMACC** on page 5-16 in Chapter 5, *ATM Commands*
RTRV-PROFILE-TRAFDSC	**RTRV-PROFILE-TRAFDSC** on page 5-19 in Chapter 5, *ATM Commands*
RTRV-SYNCN	**RTRV-SYNCN** on page 13-6 in Chapter 13, *Synchronization Commands*
RTRV-T1	**RTRV-T1** on page 4-15 in Chapter 4, *DS1 Facility Commands*

Table B-14. RTRV Commands (3 of 3)

Command	See . . .
RTRV-USER-SECU	**RTRV-USER-SECU** on page 12-14 in Chapter 12, *Security Commands*
RTRV-VCL	**RTRV-VCL** on page 5-21 in Chapter 5, *ATM Commands*

SET Commands

Set (SET) commands modify data related to the system.

Table B-15. SET Commands

Command	See . . .
SET-DAT	**SET-DAT** on page 14-29 in Chapter 14, *System Commands*
SET-NE-ALL	**SET-NE-ALL** on page 14-31 in Chapter 14, *System Commands*
SET-SID	**SET-SID** on page 14-35 in Chapter 14, *System Commands*

STA Commands

Start (STA) commands start a test.

Table B-16. STA Commands

Command	See . . .
STA-LAMPTST	**STA-LAMPTST** on page 15-11 in Chapter 15, *Test Commands*

STP Commands

Stop (STP) commands stop a test.

Table B-17. STP Commands

Command	See . . .
STP-LAMPTST	**STP-LAMPTST** on page 15-13 in Chapter 15, *Test Commands*

Traps and MIBs

C

SNMP Overview

The Simple Network Management Protocol (SNMP) is an application-level protocol used in network management to gather information from network devices. Each GranDSLAM 4200 runs an SNMP agent that collects data. The network management station can exercise all the management functions remotely from the Network Operations Center (NOC).

Traps Overview

Traps inform the NMS of an alert occurring in the system (e.g., threshold exceeded). Traps are sent at the start and completion of a test or alarm condition. Traps are configured via a Telnet session, terminal session, or via SNMP, and are based on community names. Traps are included in the MIB II, Entity, and GranDSLAM 4200 Enterprise MIB definitions. MIBs can be accessed through the Paradyne Web site at **www.paradyne.com**. Select *Technical Support* → *Online Support* → *MIBS*.

SNMP Traps

Table C-1, SNMP Traps, lists the traps supported by the GranDSLAM 4200.

Table C-1. SNMP Traps (1 of 3)

Trap Event (Trap #)	Description	Variable Binding
Standard Traps		
authenticationFailure (5)	The authenticationFailure trap signifies that the unit, acting in an agent role, has received a protocol message that has not been properly authenticated. The snmpEnableAuthenTraps object indicates whether this trap will be generated.	ifIndex (RFC 2863) ifAdminStatus (RFC 2863) ifOperStatus (RFC 2863)
linkDown(3)	The unit has recognized a failure in one of the communication interfaces.	ifIndex (RFC 2863) ifAdminStatus (RFC 2863) ifOperStatus (RFC 2863)
linkUp(4)	The unit has recognized that one of the communication interfaces has come up.	ifIndex (RFC 2863) ifAdminStatus (RFC 2863) ifOperStatus (RFC 2863)
DSX Traps		
dsx1LineStatusChange (1)	Value of an instance dsx1LineStatus changes.	ifIndex (RFC 2863) dsx1LineStatus dsx1LineStatusLastChange
M4 Traps		
atmM4IfLcdAlarm(2)	LCD (Loss of Cell Delineation) has occurred.	ifIndex (RFC 2863) ifOperStatus (RFC 2863) atmfM4TrapAlarmSeverity
atmM4IfLosAlarm(5)	LOS (Loss of Signal) has occurred.	ifIndex (RFC 2863) ifOperStatus (RFC 2863) atmfM4TrapAlarmSeverity
Enterprise-Specific Traps		
devConfigRestoreFailEvent(3)	Automated backup of a device's configuration at the scheduled time is prevented.	entPhysicalIndex
devAutoBackupFail Event(2)	Sent by a unit to indicate that the download of an incorrect or incompatible configuration file to the unit was attempted.	entPhysicalIndex
pdnAtmIfConfExtLineRateAlarm Clear(102)	The configuration has changed so that the previously invalid CAC contracts can be guaranteed in the egress direction.	ifIndex (of ATM link)
pdnAtmIfConfExtLineRateAlarm Set(2)	The configuration has changed so that the previously valid CAC contracts can no longer be guaranteed in the egress direction.	ifIndex (of ATM link)

Table C-1. SNMP Traps (2 of 3)

Trap Event (Trap #)	Description	Variable Binding
Enterprise-Specific Traps *(continued)*		
pdnAtmIfConfExtVclNoBandwidthAvail(4)	Traffic contracts associated with the virtual channel cross connection cannot be satisfied by the ATM switch.	atmVcCrossConnectIndex atmVcCrossConnectLowIfIndex atmVcCrossConnectLow Vpi atmVcCrossConnectLow Vci atmVcCrossConnectHighIfIndex atmVcCrossConnectHigh Vpi atmVcCrossConnectHigh Vci
mpeDevFileXferEvent(1)	Communicates information about the completion of a file transfer.	mpeDevFileXferStatus mpeDevFileXferErrorStatus mpeDevFileXferOperation mpeDevFileXferType mpeDevFileXferName
mpeSelfTestFailure(1)	A hardware failure was detected at unit self-test (generated after the unit has completed initialization).	entPhysicalIndex mpeDevSelfTestResults
ADSL ATU-C DMT Traps		
adslAtucPerfLofsThresh Trap	Loss of Framing 15-minute interval threshold reached.	ifIndex adslAtucPerfCurr15MinLofs adslAtucThresh15MinLofs
adslAtucPerfLossThresh Trap	Loss of Signal 15-minute interval threshold reached.	ifIndex adslAtucPerfCurr15MinLoss adslAtucThresh15MinLoss
adslAtucPerfLprsThresh Trap	Loss of Power 15-minute interval threshold reached.	ifIndex adslAtucPerfCurr15MinLprs adslAtucThresh15MinLprs
adslAtucPerfESsThresh Trap	Errored Second 15-minute interval threshold reached.	ifIndex adslAtucPerfCurr15MinESs adslAtucThresh15MinESs
adslAtucRateChangeTrap	The ATU-C's transmit rate has changed (RADSL mode only).	ifIndex adslAtucChanCurrTxRate adslAtucChanPrevTxRate
adslAtucPerfLolsThresh Trap	Loss of Link 15-minute interval threshold reached.	ifIndex adslAtucChanCurr15MinLols adslAtucThresh15MinLols
adslAtucInitFailureTrap	Atuc initialization failed.	ifIndex adslAtucCurrStatus

Table C-1. SNMP Traps (3 of 3)

Trap Event (Trap #)	Description	Variable Binding
ADSL ATU-C DMT Traps *(continued)*		
adslAtucSesLThreshTrap	Severely errored seconds 15-minute threshold reached.	ifIndex adslAtucPerfCurr15MinSesL
adslAtucUasLThreshTrap	Unavailable seconds 15-minute threshold reached.	ifIndex adslAtucPerfCurr15MinUasL
ADSL ATU-R DMT Traps		
adslAturPerfLofsThresh Trap	Loss of Framing 15-minute interval threshold reached.	ifIndex adslAtucPerfCurr15MinLofs adslAtucThresh15MinLofs
adslAturPerfLossThresh Trap	Loss of Signal 15-minute interval threshold reached.	ifIndex adslAturPerfCurr15MinLoss adslAturThresh15MinLoss
adslAturPerfLprsThresh Trap	Loss of Power 15-minute interval threshold reached.	ifIndex adslAturPerfCurr15MinLprs adslAturThresh15MinLprs
adslAturPerfESsThresh Trap	Errored Second 15-minute interval threshold reached.	ifIndex adslAturPerfCurr15MinESs adslAturThresh15MinESs
adslAturRateChangeTrap	The ATU-R's transmit rate has changed (RADSL mode only).	ifIndex adslAturChanCurrTxRate adslAturChanPrevTxRate
pdn_dslam.mib Traps		
fanEntityModuleFailure	Indicates the failure of the fan module on the device.	entPhysicalIndex
fanEntityModuleOperational	Indicates the fan module on the device is operational.	entPhysicalIndex
mpeCcn	Indicates a configuration change or software upgrade on the device.	entPhysicalIndex
mpe_Control.mib Trap		
mpeDevFileXferEvent	Communicates the status of completion of a file transfer.	mpeDevFileXferStatus mpeDevFileXferErrorStatus mpeDevFileXferFileType mpeDevFileXferFileName
pdn_Control.mib Trap		
devAutoFwEvent	Communicates the results of an auto firmware download when one takes place.	devAutoFwStatus

MIBs Overview

The GranDSLAM 4200 DSL system supports standard as well as Paradyne Enterprise MIBs. Various configuration, status, and statistical data within the SNMP agent is accessible from the NMS. The content of an SNMP agent's MIBs is defined by various Internet Request for Comments (RFC) documents.

The following sections provide brief descriptions about supported MIBs. Complete, up-to-date details about the content of all DSL MIBs are available on the Paradyne Web site at **www.paradyne.com**. Select *Technical Support* → *Online Support* → *MIBs*.

Standard MIBs

Standard MIBs supported consist of the following:

- **MIB II (RFC 1907)**
  - System Group
  - Interfaces Group
  - IP Group
  - ICMP Group
  - TCP Group
  - UDP Group
  - SNMP Group
- **MIB II (RFC 1213)**
  - System Group
  - IP Group
  - SNMP Group
- **MIB II (RFC 2863)**
  - Evolution of the Interfaces Group of MIB II
  - Extension to the Interfaces Table (ifXTable)
  - Interface Stack Group
  - Interface Test Table
  - ifTestEntry Table
- **ATM MIB (AtoM) (RFC 2515)**
  - ATM Interface Configuration Parameter Group
  - ATM Traffic Descriptor Group
  - ATM Virtual Channel Link (VCL) Configuration Group
  - Virtual Channel (VC) Cross Connect Group

- **ATM Forum MIB**
  - SNMP M4 Network Element View MIB (atmfM4.mib) and atmfM4Ext.mib
- **Entity MIB (version 2) (RFC 2737)**
  - Physical Group
  - Mapping Group
  - General Group
  - Notifications Group
- **DMT Line Code Specific MIB (RFC 2662)**
  - Includes ADSL supplement
- **DS1 MIB (RFC 2495)**

MIB II (RFC 1907)

The objects defined by MIB II (RFC 1907) are organized into the following groups:

- **System Group** – Supported.
- **Interfaces Group** – Supported for the Internet Assigned Numbers Authority (IANA) ifTypes:
  - ATM Cell Layer: (IANAifType=37)
  - ATMAAL-5 Layer: (IANAifType=49)
  - DSL Interface: (IANAifType=94) (Stack)
  - RFC 1483 Interface: (IANAifType=159)
  - DMT Fast: (IANAifType=125) or DMT Interleave: (IANAifType=124)
- **IP Group** – Supported.
- **ICMP Group** – Supported.
- **TCP Group** – Supported.
- **UDP Group** – Supported.
- **EGP Group** – Not supported.
- **Transmission Group** – Not supported.
- **SNMP Group** – Supported.

MIB II (RFC 1213)

The objects defined by MIB II (RFC 1213) are organized into the following groups:

- **System Group** (see *MIB II (RFC 1213) System Group*)
- **IP Group** – Supported at a minimum. No tables or objects containing an IP address are supported.
- **SNMP Group** – Objects that apply to a management agent are fully supported:snmpInPkts (snmp1), snmpOutPkts (snmp2), snmpInBadVersions (snmp3, snmpInBadCommunityUses (snmp5), snmpInASNParseErrs (snmp6), snmpInTotalReqVars (snmp13), snmpInTotalSetVars (snmp 14), snmpInGetRequests (snmp15), snmpInGetNexts (snmp 16), snmpInSetRequests (snmp 17), snmpInGetResponses (snmp 18), snmpInTraps (snmp 19), snmpOutTooBigs (snmp 20), snmpOutNoSuchNames (snmp21), snmpOutBadValues (snmp21), snmpOutGenErrs (snmp24), snmpOutGetResponses (snmp28), snmpOutTraps (snmp29), and snmpEnableAuthenTraps (snmp30).

MIB II (RFC 1213) System Group

System Group objects are fully supported by the GranDSLAM 4200, as shown in Table C-2, System Group Objects.

Table C-2. System Group Objects (1 of 2)

Object	Description	Setting/Contents
sysDescr *(system 1)*	Provides a full name and version identification for the GranDSLAM system's hardware and software.	The object is set to display a string in the following format: Paradyne Ubiquity ATM Stackable DSLAM; Model: *xxxx*; S/W Release: *yy.yy.yy;* CCA number: zzzz-*zzz;* Serial number: *sssssss*; Where: ■ *xxxx*: Full model number of the unit ■ *yy.yy.yy*: Software revision number ■ *zzzz-zzz*: Hardware revision number of the parentboard ■ *sssssss*: Unit serial number
sysObjectID *(system 2)*	Identifies the network management subsystem for the GranDSLAM 4200.	OIDs (Object Identifiers): ■ atm-stackable: [company enterprise OID].1.14.18 ■ atms:stack – [company enterprise OID].1.14.18.1 ■ atms:4200 – [company enterprise OID].1.14.18.1.1
sysUpTime *(system 4)*	Provides the time (in hundreths of a second) since the network management portion of the system was last reinitialized.	ASCII character string (32 characters), as set by the user. ■ **badValue(3)** – Field length exceeded.
sysContact *(system 4)*	Provides the contact information for the person managing the node.	ASCII character string (32 characters), as set by the user: ■ **badValue(3)** – Field length exceeded.
sysName *(system 5)*	Provides a contact name for the node.	ASCII character string (32 characters), as set by the user: ■ **badValue(3)** – Field length exceeded.

Table C-2. System Group Objects (2 of 2)

Object	Description	Setting/Contents
sysLocation *(system 6)*	Provides the physical location for the node.	ASCII character string (32 characters), as set by the user: ■ **badValue(3)** – Field length exceeded.
sysServices *(system 7)*	Theset of services potentially offered by the unit. The value is a sum which initially takes the value of zero. For each OSI layer (L) that this node performs tarnsactions for, 2 raised to L-1 is added to the sum.	■ **Layer 1:** Layer 1 functionality (physical) value is 2^(1-1)=2^0=1. The sum is 1. ■ **Layer2** – Layer 2 functionality (datalink/subnetwork) value is 2^(2-1)=2^1=2. The sum is 3. ■ **Layer3** – Layer 3 functionality (internet) value is 2^(3-1)=2^2=4. The sum is 7. ■ **Layer4** – Layer 4 functionality (end-to-end) value is 2^(4-1)=2^3=8. The sum is 15. ■ **Layer7** – Layer 7 functionality (application) value is 2^(7-1)=2^6=64. The sum is 79.

MIB II (RFC 2863)

The objects defined by MIB II (RFC 2863) are organized into the following groups:

- Interfaces Group (see *Evolution of the Interfaces Group of MIB II (RFC 2863)*)
- *MIB II (RFC 2863) Extension to the Interface Table*
- *MIB II (RFC 2863) Interface Stack Group*
- *MIB II (RFC 2863) Interface Test Table*
- *MIB II (RFC 2863) ifTestEntry Table*

Evolution of the Interfaces Group of MIB II (RFC 2863)

The evolution of the Interfaces Group of MIB II (RFC 2863 converted to SNMP v1) consists of an object indicating the number of interfaces supported by the GranDSLAM 4200 and an interface table containing an entry for each interface. There will be interface table entries for an uplink interface, each of the ATM cell interfaces, an AAL5 interface, a DSL interface, and an RFC 1483 virtual interface (see Table C-3, Interfaces Group Objects, for the objects supported).

Table C-3. Interfaces Group Objects (1 of 3)

Object	Description	Setting/Contents
ifNumber *(interfaces 1)*	Supported as specified in the Evolution MIB.	Specifies the number of interfaces for this unit in the ifTable.
ifIndex *(ifEntry 1)*	Provides the index into the interface table (ifTable) and to other MIB tables. It is recommended that values be assigned contiguously starting with 1. The value for each interface sublayer must remain constant between NMS reinitializations. See See Table C-4, ifIndex Assignments.	Interface List: ■ **CONx*:** Console port, Layer 1, maximum 1 per unit, exists in SU, AU, and BU. ■ **ETHx*:** Ethernet management port, Layer 1, maximum 1 per unit, exists in SU and AU. ■ **T1x*:** T1 interface, Layer 1, maximum 8 per unit, exists in SU, AU, and BU. ■ **E1x*:** E1 interface, Layer 1, maximum 8 per unit, exists in SU, AU, and BU. ■ **ATMx*:** ATM uplink, Layer 3, maximum 96 per unit, exists in SU, AU, and BU. ■ **AA5L_x*:** ATM AAL5, Layer 4, maximum 1 per unit, exists in SU and AU. ■ **ReachDSLx*:** ReachDSL port, Layer 1, maximum 48 per unit, exists in SU, AU, and BU. ■ **DSLChan_x*:** DSL channels, Layer 2, maximum 96 per unit, exists in SU, AU, and BU. * x = Interface/port number within the same chassis.
ifDescr *(ifEntry 2)*	Supplies text for each interface:	■ See Table C-4, ifIndex Assignments.
ifType *(ifEntry 3)*	Identifies the interface type based on the physical/link protocol(s).	■ See Table C-4, ifIndex Assignments.
ifMtu *(ifEntry 4)*	Identifies the largest datagram that can be sent or received on an interface.	■ DSL1–24 interface: 53 ■ ATM1–24 interface: 53 ■ ATM90 interface: 53 ■ ATM91 interface: 53 ■ AAL5 interface: 4128 (set to largest PDU size that can be processed by the AA5 entity) ■ RFC1483 interface: 1500
ifSpeed *(ifEntry 5)*	Provides the interface's current bandwidth in bits per second (bps).	DSL1–24 interface: 32–2176 kbps ATM1–24 interface: 32–2176 kbps ■ ATM90 interface: 0 ■ ATM91 interface: 0 ■ BUS1: 512k ■ RFC1483 interface: 0
ifPhysAddress *(ifEntry 6)*	Identifies the physical address for the interface.	■ For GranDSLAM 4200 ATM interfaces, this object should contain an octet string of zero length.

Table C-3. Interfaces Group Objects (2 of 3)

Object	Description	Setting/Contents
ifAdminStatus *(ifEntry 7)*	Specifies the desired state (configuration) of the interface.	Upon initialization, all interfaces start with down(2). As a result of either management action or configuration, status is changed to up (1). Values that can be assigned for each interface after initialization are Up(1), Down(2), or Testing(3.
ifOperStatus *(ifEntry 8)*	Specifies the current operational state of the interface.	Values that can be assigned for each interface are Up(1), Down(2), Testing(3), Unknown(4), notPresent(6), or lowerLayerDown(7)
ifLastChange *(ifEntry 9)*	Indicates the amount of time the interface has been up and running.	Contains the value of sysUpTime object at the time the interface entered its current operational state.
ifInOctets *(ifEntry 10)*	Input Counter objects that collect input statistics on data received by the interface.	■ DSL1–24 interface: Number of octets received. ■ ATM1–24 interface: Number of cells received multiplied by 53. ■ ATM90 interface: Number of cells received multiplied by 53. ■ ATM91 interface: Number of cells received multiplied by 53. ■ AAL5 interface: Number of cells received CPCS PDU octets. ■ RFC1483 interface: Number of cells received CPCS PDU octets.
ifInUcastPkts *ifEntry 11)*		■ DSL1–24 interface: 0 ■ ATM1–24 interface: 0 ■ ATM90 interface: 0 ■ ATM91 interface: 0 ■ AAL5 interface: PDUs inbound is the number of AAL5 CPCS PDUs passed to a higher layer. ■ RFC1483 interface: 0
ifInUcastPkts *ifEntry 12)*		0
ifInDiscards *(ifEntry 13)*		■ DSL1–24 interface: Number of octets received for discard ■ ATM1–24 interface: 0 ■ ATM90 interface: 0 ■ ATM91 interface: 0 ■ AAL5 interface: Number of AAL5 CPCS PDUs discarded. ■ RFC1483 interface: 0

Table C-3. Interfaces Group Objects (3 of 3)

Object	Description	Setting/Contents
ifInErrors *(ifEntry 14)*		■ DSL1–24 interface: 0 ■ ATM1–24 interface: The number of cells dropped due to uncorrectable HEC errors. ■ ATM90 interface: 0 ■ ATM91 interface: 0 ■ AAL5 interface: Number of errored AAL5 CPCS PDUs received. ■ RFC1483 interface: 0
ifInUnknownProtos *(ifEntry 15)*		Not supported.
ifOutOctets *(ifEntry 16)*	Output Counter objects that collect output statistics on data received by the interface.	■ DSL1–24 interface: Number of octets sent. ■ ATM1–24 interface: Number of cells sent multiplied by 53. ■ ATM90 interface: Number of cells sent multiplied by 53. ■ ATM91 interface: Number of cells sent multiplied by 53. ■ BUS1: 0 ■ AAL5 interface: Number of octets in packets. ■ RFC1483 interface: 0
ifOutUcastPkts *(ifEntry 17)*		0
ifOutDiscards *(ifEntry 19)*		0
ifOutErrors *(ifEntry 20)*		0
ifOutQLen *(ifEntry 20)*		Not supported.
ifOutErrors *(ifEntry 20)*		Not supported.

Table C-4. ifIndex Assignments

Interface	ifType (IANAifType)	IfIndex	ifDescr
T1	ds1(18)	00cc00190*x* (*x*=1–8)	“T1 interface in unit ‘cc’”
E1	e1(19)	00cc00190*x* (*x*=1–8)	“E1 interface in unit ‘cc’”
ATM Link	atm(37)	00cc00390*x*	“ATM Link in unit ‘cc’”
AAL5	aal5(49)	00cc004901	“ATM-AAL5 interface in unit ‘cc’”
ReachDSL port	adsl(94)	00cc001*yyy* (yyy=1–48)	“ReachDSL port ‘yy’ in unit ‘cc’”
DSL channels	■ fast(94) ■ interleave(126)	■ fast channels: 00cc002*yyy* (yyy=1–48) ■ interleave channels: 00cc002*yyy* (yyy=49–96)	“ReachDSL port ‘yy’ in unit ‘cc’”
ATM	atm(37)	00cc003*yyy* (yyy=1–96)	“ATM Port interface ‘yy’ in unit ‘cc’”

MIB II (RFC 2863) Extension to the Interface Table

This extension contains additional objects for the Interface table. Only the following objects are supported:

- ifLinkUpDownTrapEnable(14) – Read/Write. SNMP traps must be enabled on the unit for changes to this object to take effect.
- ifConnectorPresent(17) – Read only.

MIB II (RFC 2863) Interface Stack Group

For GranDSLAM 4200, the interface stack group is used to show the relationship between multiple logical and physical interfaces. The ifStackTable entries for GranDSLAM 4200 are shown in Table C-5, GranDSLAM 4200 IfStackTable Entries.

Table C-5. GranDSLAM 4200 IfStackTable Entries

GranDSLAM 4200 Higher Interface Number	GranDSLAM 4200 Mid-Interface Number (Fast Channel)	GranDSLAM 4200 Lower Interface Number
atm1 – atm24	adsl1:2 – adsl24:2	adsl1 – adsl24
AAL5	–	cel1
0	–	wan1

- ifStackHigherLayer Object (ifStackEntry1) – Provides the ifIndex corresponding to the higher sublayer running on top of the interface specified in the ifStackLowerLayer object. The higher interface number ranges from dsl1–dsl24, cel1, and wan1. The lower interface number is 0.
- ifStackLowerLayer Object (ifStackEntry2) – Provides the ifIndex corresponding to the lower sublayer running below the interface specified in the ifStackHigherLayer object. The higher interface number is 0. The lower interface number ranges from atm1–atm24.

MIB II (RFC 2863) Interface Test Table

For GranDSLAM 4200, the Interface Test Table is supported for interface-related diagnostic tests such as loopback.

MIB II (RFC 2863) ifTestEntry Table

This table contains one entry per interface and defines objects that allow a network manager to instruct an agent to test an interface. For the GranDSLAM 4200, loopback tests can be performed. The objects supported are the following:

- ifTestId
- IfTestStatus
- ifTestType
- ifTestResult
- ifTestCode
- ifTestOwner
- ifIndex

ATM MIB (AtoM) (RFC 2515)

The ATM MIB provides objects for management of the ATM cell and AAL5 interfaces, as well as guidance for the ifTable. Nine groups are supported:

- ATM Interface Configuration Parameter Group (atmInterfaceConfEntry) – Supported. See *ATM Interface Configuration Parameter Group (RFC 2515)* on page C-14.
- TC Sublayer Group – Not supported.
- ATM Traffic Descriptor Group – Contains a set of ATM traffic parameters including the ATM traffic service category. See *ATM Interface Traffic Descriptor Group (RFC 2515)* on page C-15.
- ATM Virtual Channel Link (VCL) Configuration Group – Supported. See *ATM VCL Configuration Group (RFC 2515)* on page C-16.
- Virtual Channel Cross Connect Group – Supported. See *Virtual Channel Cross Connect Group (RFC 2515)* on page C-17.

ATM Interface Configuration Parameter Group (RFC 2515)

This group contains information on ATM cell layer configuration of local ATM interfaces (Backplane and Management Processor) on an ATM device (see Table C-6, ATM Interface Configuration MIB Group Objects).

Table C-6. ATM Interface Configuration MIB Group Objects (1 of 2)

Object	Description	Setting/Contents
atmInterfaceMaxVpcs (atmInterfaceConf Entry 1)	Maximum number of PVCs supported on this ATM interface.	Integer. Only valid value for all interfaces is zero.
atmInterfaceMaxVccs (atmInterfaceConf Entry 2)	Maximum number of VCCs supported on this ATM interface.	Integer. Valid values are: ■ ATM1–24 interface: 255 ■ ATM90 interface: 64 (4 multiplied by 24 ports) ■ ATM91 interface: 282 (253 pool + 32 defaults + 3 reserved)
atmInterfaceConfVpcs (atmInterfaceConf Entry 3)	Number of VPCs configured for use at this ATM interface.	Integer. Actual number of VPCs.
atmInterfaceConfVccs (atmInterfaceConf Entry 4)	This table allows access to contents of the ARP cache.	This table is implemented with read/write access.
atmInterfaceMaxActiveVpiBits (atmInterfaceConf Entry 5)	Maximum number of active VPI bits configured for use on this ATM interface.	Integer. Valid values are: ■ ATM1–24 interface: 4 ■ ATM90 interface: 5 ■ ATM91 interface: 0
atmInterfaceMaxActiveVciBits (atmInterfaceConf Entry 6)	Maximum number of active VCI bits configured for use on this ATM interface.	Integer. Valid values are: ■ ATM1–24 interface: 8 ■ ATM90 interface: 6 ■ ATM91 interface: 8
atmInterfaceIlmiVpi (atmInterfaceConf Entry 7)	The VPI value of the VCC supporting the ILMI on this ATM interface.	Read-only. Value is zero.
atmInterfaceIlmiVci (atmInterfaceConf Entry 8)	The VCI value of the VCC supporting the ILMI on this ATM interface.	Read-only. Value is 16.
atmInterfaceMyNeighborIp Address (atmInterfaceConf Entry 11)	The value of this object contains the IP address of the neighbor system connected to the far end of this interface.	Read-only. Valid values are: ■ ATM1–24 interface: The IP address assigned for the purpose of persistent management of the endpoint. ■ ATM90 interface: 0.0.0.0 ■ ATM91 interface: 0.0.0.0

Table C-6. ATM Interface Configuration MIB Group Objects (2 of 2)

Object	Description	Setting/Contents
atmInterfaceMyNeighborIfName (atmInterfaceConf Entry 12)	The value of this object contains textual name of the the interface on the neighbor system connected to the far end of this interface.	Read-only. Valid values are: ■ ATM1–24 interface: Corresponding the value of atmfPortMyIfName through ILMI interaction with the neighbor system. ■ ATM90 interface: zero-length string ■ ATM91 interface: zero-length string
atmInterfaceCurrentMaxVpiBits (atmInterfaceConf Entry 13)	The maximum number of VPI bits that can currenly be used at this ATM interface.	Valid values are: ■ ATM1–24 interface: 4 ■ ATM90 interface: 5 ■ ATM91 interface: 0
atmInterfaceCurrentMaxVciBits (atmInterfaceConf Entry 14)	The maximum number of VCI bits that can currenly be used at this ATM interface.	Valid values are: ■ ATM1–24 interface: Actual (default is 8) ■ ATM90 interface: 6 ■ ATM91 interface: 8
atmInterfaceSubscrAddress (atmInterfaceConf Entry 15)	The identifier assigned by a service provider to the network side of the public UNI.	The only valid value is zero.

ATM Interface Traffic Descriptor Group (RFC 2515)

The ATM virtual link tables use this ATM Traffic Descriptor table to assign traffic parameters and service category to the receive and trnsmit directions of the ATM virtual links (VPLs and VCLs). The only object is atmServiceCategory (atmTrafficDescrParamEntry 10). The only valid values for this object are cbr(2) (Constant Bit Rate), rtVbr(3) (Real-Time Variable Bit Rate), nrtVbr(4) (NonReal-Time Variable Bit Rate), and ubr(6) (Unspecified Bit Rate).

ATM VCL Configuration Group (RFC 2515)

Contains configuration and state information of a bidirectional VCL at an ATM interface. The atmVclEntry is supported as shown in Table C-7, VCL Configuration MIB Group Objects.

Table C-7. VCL Configuration MIB Group Objects

Object	Description	Setting/Contents
atmVclOperStatus (atmVclEntry 4)	Operational status of the VCL.	Possible values are: ■ up(1): VCL is currently operational ■ down(2): VCL is currently not operational ■ unknown(3): The state of the VCL cannot be determined.
atmVclLastChange (atmVclEntry 5)	Contains the value of the sysUpTime object at the time the VCL entered its current operational state.	Integer. If the current state was entered into prior to the last reinitialization of the agent, then this object contains a zero value.
atmVccAalType (atmVclEntry 8)	Identifies the type of AAL used with the VCC.	The only valid values are: ■ aal5(3): AAL5 ■ unknown(5): The AAL type cannot be determined.
atmVccAal5CpcsTransmit SduSize (atmVclEntry 9)	Contains the maximum Common Part Convergence Sublayer SDU size supported in the transmit direction of this VCC.	Not supported.
atmVccAal5CpcsReceive SduSize (atmVclEntry 10)	Contains the maximum Common Part Convergence Sublayer SDU size supported in the Receive direction of this VCC.	Not supported.
atmVclEncapsType (atmVclEntry 11)	Specifies the type of data encapsulation used over the AAL5 Service Specific Convergence Sublayer.	Not supported.

Virtual Channel Cross Connect Group (RFC 2515)

This table contains configuration and state information of point-to-point, point-to-multipoint, and multipoint-to-multipoint VC cross-connections for PVCs. This table has read access and is used to cross-connect the VCLs together in an ATM switch or network that belongs to a VC connection (see Table C-8, Virtual Channel Cross Connect Group Objects).

Table C-8. Virtual Channel Cross Connect Group Objects

Object	Description	Setting/Contents
atmVcCrossConnectL2HOperStatus (atmVcCrossConnectEntry 9)	Identifies the current operational status of the VC cross-connection in one direction (low to high).	The only valid values are: ■ up(1) ■ down(2) ■ unknown(3): Not supported.
atmVcCrossConnectH2LOperStatus (atmVcCrossConnectEntry 10)	Identifies the current operational status of the VC cross-connection in one direction (high to low).	The only valid values are: ■ up(1) ■ down(2) ■ unknown(3): Not supported.
atmVcCrossConnectL2HLastChange (atmVcCrossConnectEntry 11)	Identifies the value of the Mib II's sysUpTime object at the time that this VC cross-connection entered its current operational state in a low to high direction.	Integer. If the current state was entered into prior to the last reinitialization of the agent, then this object contains a zero value.
atmVcCrossConnectH2LLastChange (atmVcCrossConnectEntry 12)	Identifies the value of the Mib II's sysUpTime object at the time that this VC cross-connection enterde its current operational state in a high to low direction.	Integer. If the current state was entered into prior to the last reinitialization of the agent, then this object contains a zero value.
atmVcCrossConnectRowStatus (atmVcCrossConnectEntry 13)	Used to create a new cross-connection row for the cross-connecting VCLs created using the atmVclTable or to change or delete an existing cross-connection.	The only valid values are: ■ active: Cannot be set to active unless the atmVcCrossConnectAdminStatus object exists in the row. ■ createAndGo ■ destroy

ATM Forum MIB

The ATM Forum MIB (atmfM4.MIB) is defined in the ATM Forum SNMP M4 Network Element View MIB document. The supported objects are listed in Table C-9, ATM Forum SNMP M4 Network Element View MIB Group Objects.

Table C-9. ATM Forum SNMP M4 Network Element View MIB Group Objects

Object	Description	Setting/Contents
atmfM4TcCellScrambling (atmfM4TcAdapterEntry 1)	Specifies cell scrambling.	Only disable is supported.
atmfM4TcAlarmSeverityIndex (atmfM4TcAdapterEntry 2)	Specifies the index of the entry in the communications alarm severity profile table that should be used.	The only valid value is zero.
atmfM4IfType (atmfM4AtmLayerEntry 1)	For ATM cell layer.	Always uni(1).
atmfM4IfType (atmfM4AtmLayerEntry 2)	For ATM cell layer.	Integer.
atmfM4IfSubscriberAddress (atmfM4AtmLayer 3)	Used for SVCs.	Zero-length string.
atmfM4IfPreferredCarrier (atmfM4AtmLayer 4)	Used for SVCs.	Zero-length string.
atmfM4IfFarEndCarrierNetwork (atmfM4AtmLayer 5)	Used for SVCs in the B-ICI interface.	Zero-length string.
atmM4CellProtoCurrInOAMCells (atmfM4CellProtoCurrEntry 3)	Count of OAM cells on this interface for the current 15-minute interval.	Always zero.
atmM4CellProtoCurrInOAMCells (atmfM4CellProtoCurrEntry 3)	Count of OAM cells on this interface for the previous 15-minute interval.	Always zero.

Paradyne Extensions to the ATM Interface Configuration Table, ATM Forum M4

The following MIBs listed in Table C-10, Paradyne Extensions to ATM Interface Configuration Table, are intended to augment the ATM Interface Configuration Table, ATM Forum M4.

Table C-10. Paradyne Extensions to ATM Interface Configuration Table

Table	Object
pdnAmIfConfExtEntry (pdn_AtmExt.mib)	pdnAtmIfConfExtVbrRtBandwidthUtil pdnAtmIfConfExtVbrNrtBandwidthUtil pdnAtmIfConfExtHecErrorThreshold pdnAtmIfConfExtUnknownCellThreshold pdnAtmIfConfExtOcdEventThreshold
pdnAtmTrafficDescrParamExtEntry (pdn_AtmExt.mib)	pdnAtmTrafficDescrParamName pdnAtmTrafficPolicing
pdnAtmfM4TcProtoCurrExtEntry (pdn_AtmM4Ext.mib)	pdnAtmfM4TcProtoCurrCellIns pdnAtmfM4TcProtoCurrCellOuts pdnAtmfM4TcProtoCurrInDiscards pdnAtmfM4TcProtoCurrOutDiscards pdnAtmfM4TcProtoCurrLcdEvents pdnAtmfM4TcProtoCurrUnknownCells pdnAtmfM4TcProtoCurrCorrectedHEC
pdnAtmfM4TcProtoHistExtEntry (pdn_AtmM4Ext.mib)	pdnAtmfM4TcProtoHistCellIns pdnAtmfM4TcProtoHistCellOuts pdnAtmfM4TcProtoHistInDiscards pdnAtmfM4TcProtoHistOutDiscards pdnAtmfM4TcProtoHistLcdEvents pdnAtmfM4TcProtoHistUnknownCells pdnAtmfM4TcProtoHistCorrectedHEC
pdnAtmVclCurrEntry (pdn_AtmStats.mib)	pdnAtmVclCurrElapsedTime pdnAtmVclCurrTotalCellIns pdnAtmVclCurrTotalInDiscards pdnAtmVclCurrTotalCellOuts pdnAtmVclCurrTotalOutDiscards
pdnAtmVclHistEntry (pdn_AtmStats.mib)	pdnAtmVclHistIndex pdnAtmVclHistElapsedTime pdnAtmVclHistTotalCellIns pdnAtmVclHistTotalInDiscards pdnAtmVclHistTotalCellOuts pdnAtmVclHistTotalOutDiscards
pdnAtmfM4VcLoopbackTestEntry (pdn_AtmM4Ext.mib)	pdnAtmfM4VcLoopbackTestElpsTime pdnAtmfM4VcLoopbackTestCellsSent pdnAtmfM4VcLoopbackTestCellsRcvd pdnAtmfM4VcLoopbackTestMinRTDelay pdnAtmfM4VcLoopbackTestMaxRTDelay pdnAtmfM4VcLoopbackTestAvgRTDelay pdnAtmfM4VcLoopbackTestErrorCode

Entity MIB (version 2) (RFC 2737)

The Entity MIB contains the following five groups of MIB objects:

- entityPhysical Group – Describes the physical entities managed by a single agent. Supported. See *Entity Physical Group (RFC 2737)*.
- entityLogical Group – Describes the logical entities managed by a single agent. Not supported.
- entityMapping Group – Describes associations between physical entities, logical entities, interfaces, and oninterface ports managed by a single agent. Supported.
- entityGeneral Group – Describes general system attributes shared by all types of entities managed by a single agent. Supported.
- entityNotifications Group – Contains status indication notifications. Supported.

Entity Physical Group (RFC 2737)

This table contains attributes supported for each of the physical entities in the GranDSLAM 4200 (see Table C-11, Entity Physical Group Objects).

Table C-11. Entity Physical Group Objects (1 of 7)

Object	Description	Setting/Contents
entPhysicalIndex (entPhysicalEntry 1)	The index for this entry.	Not accessible.
entPhysicalDescr (entPhysicalEntry 2)	A textual description of the physical entry. Read-only.	Read only. Valid values are: ■ Stack: sysDescr in the MIB II System Group. ■ Chassis: Company Name; ATM Stackable 4200 DSLAM; Model Description; Unit #. ■ Main card: ATM Stackable 4200; Main Card Model Description; Unit # ■ Uplink module: ATM Stackable 4200; Uplink Module; Unit # ■ Splitter card: ATM Stackable 4200 DSLAM; Splitter Module; Unit # ■ T1/E1 port: ATM Stackable 4200 DSLAM; T1/E1 port; Unit # ■ Console port: ATM Stackable 4200 DSLAM; Console port; Unit # ■ Ethernet Mgmt port: ATM Stackable 4200 DSLAM; Ethernet port; Unit # ■ Temp sensor: ATM Stackable 4200 DSLAM; Fan #; Unit # ■ Fan: ATM Stackable 4200 DSLAM; Temperature Sensor #; Unit # ■ Management Plane PLD: ATM Stackable 4200 DSLAM; Management Plane PLD.; Unit #

Table C-11. Entity Physical Group Objects (2 of 7)

Object	Description	Setting/Contents
entPhysicalDescr (entPhysicalEntry 2) *(continued)*		■ Led PLD: ATM Stackable 4200 DSLAM; Led PLD.; Unit # ■ T1/E1 PLD: ATM Stackable 4200 DSLAM; T1/E1 PLD; Unit #
entPhysicalVendorType (entPhysicalEntry 3)	Identifies the vendor-specific hardware type of the physical entity.	Read only. Valid values are: ■ Stack: {*Company Enterprise*.1.14.18.1.1}atmstk-4200 ■ Chassis: {*Company Enterprise*.1.14.18.2.1}atmstk-4211, {*Company Enterprise*.1.14.18.2.1}atmstk-4212 ■ Main card: {*Company Enterprise*.1.14.18.3.1}atmstk-24port-main ■ Uplink module: {*Company Enterprise*.1.14.18.4.1}atmstk-t1e1-uplink-module ■ Splitter card: {*Company Enterprise*.1.14.18.4.2}atmstk-24Port-int-splitter ■ ReachDSL port: {*Company Enterprise*.1.14.18.5.1}atmstk-reachDsl-port ■ T1/E1 port: {*Company Enterprise*.1.14.18.5.5}atmstk-t1e1port ■ Console port: {*Company Enterprise*.1.14.18.5.3}atmstk-rs232-dce-port ■ Ethernet Mgmt port: {*Company Enterprise*.1.14.18.5.4}atmstk-ethernet-port ■ Temp sensor: {*Company Enterprise*.1.14.18.6.2}atmstk-comp-temp_sensor ■ Fan:*Company Enterprise*.1.14.18.6.1}atmstk-comp-fan ■ Management Plane PLD: *Company Enterprise*.1.14.18.6.2}atmstk-comp-pld ■ Led PLD: *Company Enterprise*.1.14.18.6.2}atmstk-comp-pld ■ T1/E1 PLD: *Company Enterprise*.1.14.18.6.2}atmstk-comp-pld
entPhysicalContainedIn (entPhysicalEntry 4)	Identifies the value of entPhysicalIndex for the physical entity containing this physical entity. A value of zero indicates this physical entity is not contained in any other physical entity.	Read only. Valid values are the following: ■ Stack: 0 ■ Chassis: entPhysicalIndex for the Stack entity ■ Main card: entPhysicalIndex for the corresponding Chassis entity ■ Uplink module: entPhysicalIndex for the corresponding Chassis entity ■ Splitter card: entPhysicalIndex for the corresponding Chassis entity

Table C-11. Entity Physical Group Objects (3 of 7)

Object	Description	Setting/Contents
entPhysicalContainedIn (entPhysicalEntry 4) *(continued)*		■ ReachDSL port: entPhysicalIndex for the corresponding Main Card entity ■ T1/E1 port: entPhysicalIndex for the corresponding Main Card entity ■ Console port: entPhysicalIndex for the corresponding Main Card entity ■ Ethernet Mgmt port: entPhysicalIndex for the corresponding Main Card entity ■ Temp sensor: entPhysicalIndex for the corresponding Chassis entity ■ Fan: entPhysicalIndex for the corresponding Chassis entity ■ Management Plane PLD: entPhysicalIndex for the corresponding Main Card entity ■ Led PLD: entPhysicalIndex for the corresponding Main Card entity ■ T1/E1 PLD: entPhysicalIndex for the corresponding Uplink Module entity
entPhysicalClass (entPhysicalEntry 5)	Identifies general hardware type of the physical entity.	Read only. Valid values are the following: ■ Stack: stack (11) ■ Chassis: chassis (3) ■ Main card: module (9) ■ Uplink module: module (9) ■ Splitter card: module (9) ■ ReachDSL port: port (10) ■ T1/E1 port: port (10) ■ Console port: port (10) ■ Ethernet Mgmt port: port (10) ■ Temp sensor: sensor (8) ■ Fan: fan (7) ■ Management Plane PLD: other (1) ■ Led PLD: other (1) ■ T1/E1 PLD: other (1)

Table C-11. Entity Physical Group Objects (4 of 7)

Object	Description	Setting/Contents
entPhysicalParentRelPos(entPhysicalEntry 6)	Identifies the relative position of this child component among is sibling components.	Read only. Valid values are the following: ■ Stack: -1 ■ Chassis: Position in the stack (1–5) ■ Main card: 1 ■ Uplink module: 2 ■ Splitter card: 3 ■ ReachDSL port: A value 1–24 ■ T1/E1 port: A value 1–8 ■ Console port: 1 ■ Ethernet Mgmt port: 2 ■ Temp sensor: A value 1–3 ■ Fan: A value 1–2 ■ Management Plane PLD: 1 ■ Led PLD: 2 ■ T1/E1 PLD: 1
entPhysicalName(entPhysicalEntry 7)	Identifies the textual name of the physical entity.	Read only. Valid values are the following: ■ Stack: ATM_Stack ■ Chassis: Chassis_4200 ■ Main card: MainCard ■ Uplink module: UplinkModule ■ Splitter card: SplitterCard ■ ReachDSL port: ReachDSL_Port # ■ T1/E1 port: T1/E1_Port # ■ Console port: Console ■ Ethernet Mgmt port: Ethernet_1 ■ Temp sensor: T_Sensor # ■ Fan: Fan # ■ Management Plane PLD: MP_PLD ■ Led PLD: LED_PLD ■ T1/E1 PLD: T1E1_PLD
entPhysicalHardwareRev(entPhysicalEntry 8)	Identifies the hardware revision string for the physical entity.	Read only. Valid values are the following: ■ Stack: string containing the revision number of the CCA ■ Chassis: string containing the revision number of the CCA ■ Main card: string containing the revision number of the CCA

Table C-11. Entity Physical Group Objects (5 of 7)

Object	Description	Setting/Contents
entPhysicalHardwareRev(entPhysicalEntry 8) *(continued)*		■ Uplink module: string containing the revision number of the CCA ■ Splitter card: string containing the revision number of the CCA ■ ReachDSL port: string containing the revision number of the CCA ■ T1/E1 port: string containing the revision number of the CCA ■ Console port: zero-length string ■ Ethernet Mgmt port: zero-length string ■ Temp sensor: zero-length string ■ Fan: zero-length string ■ Management Plane PLD: zero-length string ■ Led PLD: zero-length string ■ T1/E1 PLD: zero-length string
entPhysicalFirmwareRev (entPhysicalEntry 9)	Identifies the firmware revision string for the physical entity.	Read only. Valid value is a zero-length string for all entities except ReachDSL port, which is a string reflecting the DSP revision.
entPhysicalSoftwareRev(entPhysicalEntry 10)	Identifies the software revision string for the physical entity.	Read only. Valid values are the following: ■ Stack: zero-length string ■ Chassis: zero-length string ■ Main card: string containing the currently running firmware ■ Uplink module: zero-length string ■ Splitter card: zero-length string ■ ReachDSL port: zero-length string ■ T1/E1 port: zero-length string ■ Console port: zero-length string ■ Ethernet Mgmt port: zero-length string ■ Temp sensor: zero-length string ■ Fan: zero-length string ■ Management Plane PLD: string containing the currently running software revision level ■ Led PLD: string containing the currently running software revision level ■ T1/E1 PLD: string containing the currently running software revision level

Table C-11. Entity Physical Group Objects (6 of 7)

Object	Description	Setting/Contents
entPhysicalSerialNum(entPhysicalEntry 11)	Identifies the vendor-specific serial number string for the physical entity.	Read/Write. Valid values are the following: ■ Stack: zero-length string ■ Chassis: string with the serial number of this chassis ■ Main card: string with the serial number of the main card (could be the same as the chassis) ■ Uplink module: zero-length string ■ Splitter card: zero-length string ■ ReachDSL port: zero-length string ■ T1/E1 port: zero-length string ■ Console port: zero-length string ■ Ethernet Mgmt port: zero-length string ■ Temp sensor: zero-length string ■ Fan: zero-length string ■ Management Plane PLD: zero-length string ■ Led PLD: zero-length string ■ T1/E1 PLD: zero-length string
entPhysicalMfgName (entPhysicalEntry 12)	Identifies the manufacturer of the physical entity.	Read only. Valid value is Paradyne for all entities except ReachDSL port, which is a string reflecting the DSP revision.
entPhysicalModelName (entPhysicalEntry 13)	Identifies the vendor-specific model name of the physical entity.	Read only. Valid values are the following: ■ Stack: zero-length string ■ Chassis: string with the model number of this chassis ■ Main card: string with the model number of the main card (could be the same as the chassis) ■ Uplink module: string describing the model number of the uplink module ■ Splitter card: string describing the model number of the splitter card ■ ReachDSL port: zero-length string ■ T1/E1 port: zero-length string ■ Console port: zero-length string ■ Ethernet Mgmt port: zero-length string ■ Temp sensor: zero-length string ■ Fan: zero-length string ■ Management Plane PLD: zero-length string ■ Led PLD: zero-length string ■ T1/E1 PLD: zero-length string

Table C-11. Entity Physical Group Objects (7 of 7)

Object	Description	Setting/Contents
entPhysicalAlias (entPhysicalEntry 14)	Identifies the alias name of the physical entity as specified by the network manager.	Read/write. Valid value is a zero-length string, however the agent may set the value to a locally unique default value.
entPhysicalAssetID (entPhysicalEntry 15)	Identifies the user-assigned asset tracking identifier of the physical entity as assigned by the network manager.	Read only. Valid values are the following: ■ Stack: zero-length string (read/write) ■ Chassis: zero-length string (read/write) ■ Main card: zero-length string (read/write) ■ Uplink module: zero-length string (read/write) ■ Splitter card: zero-length string (read/write) ■ ReachDSL port: zero-length string (read only) ■ T1/E1 port: zero-length string (read only) ■ Console port: zero-length string (read only) ■ Ethernet Mgmt port: zero-length string (read only) ■ Temp sensor: zero-length string (read only) ■ Fan: zero-length string (read only) ■ Management Plane PLD: zero-length string (read only) ■ Led PLD: zero-length string (read only) ■ T1/E1 PLD: zero-length string (read only)
entPhysicalIsFRU (entPhysicalEntry 16)	Identifies whether (TRUE) or not (FALSE) this entity is considered to be a field-replacable unit by the vendor.	Read only. Valid values are the following: ■ Stack: TRUE ■ Chassis: TRUE ■ Main card: TRUE ■ Uplink module: TRUE ■ Splitter card: TRUE ■ ReachDSL port: FALSE ■ T1/E1 port: FALSE ■ Console port: FALSE ■ Ethernet Mgmt port: FALSE ■ Temp sensor: FALSE ■ Fan: FALSE ■ Management Plane PLD: FALSE ■ Led PLD: FALSE ■ T1/E1 PLD: FALSE

DMT Line Code Specific MIB (RFC 2662)

The objects supported for the DMT Line Code Specific MIB are listed in Table C-12, DMT Line Code Specific MIB Objects.

Table C-12. DMT Line Code Specific MIB Objects (1 of 5)

Table	Objects	Contents
adslLineEntry	■ adslLineCoding(1) ■ adslLineType(2) ■ adslLineSpecific(3) ■ adslLineConfProfile(4) ■ adslLineAlarmConfProfile(5)	■ Read only ■ Read only ■ Read only ■ Read/write. SNMP string ■ Read/write. SNMP string
adslAtucPhysEntry	■ adslAtucInvSerialNumber(1) ■ adslAtucInvVendorID(2) ■ adslAtucInvVersionNumber(3) ■ adslAtucCurrSnrMgr(4) ■ adslAtucCurrAtn(5) ■ adslAtucCurrStatus(6) ■ adslAtucCurrOutputPwr(7) ■ adslAtucCurrAttainableRate(8)	■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only
adslAturPhysEntry	■ adslAturInvSerialNumber(1) ■ adslAturInvVendorID(2) ■ adslAturInvVersionNumber(3) ■ adslAturCurrSnrMgr(4) ■ adslAturCurrAtn(5) ■ adslAturCurrStatus(6) ■ adslAturCurrOutputPwr(7) ■ adslAturCurrAttainableRate(8)	■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only
adslAtucChanEntry	■ adslAtucChanInterleaveDelay(1) ■ adslAtucChanCurrTxRate(2) ■ adslAtucChanPrevTxRate(3) ■ adslAtucChanCrcBlockLength(4)	■ Read only ■ Read only ■ Read only ■ Read only
adslAturChanEntry	■ adslAturChanInterleaveDelay(1) ■ adslAturChanCurrTxRate(2) ■ adslAturChanPrevTxRate(3) ■ adslAturChanCrcBlockLength(4)	■ Read only ■ Read only ■ Read only ■ Read only

Table C-12. DMT Line Code Specific MIB Objects (2 of 5)

Table	Objects	Contents
adslAtucPerfDataEntry	■ adslAtucPerfLofs(1) ■ adslAtucPerfLoss(2) ■ adslAtucPerfLols(3) ■ adslAtucPerfESs(5) ■ adslAtucPerfValidIntervals(7) ■ adslAtucPerfInvalidIntervals(8) ■ adslAtucPerfCurr15MinTimeElapsed(9) ■ adslAtucPerfCurr15MinLofs(10) ■ adslAtucPerfCurr15MinLoss(11) ■ adslAtucPerfCurr15MinLols(12) ■ adslAtucPerfCurr15MinESs(14) ■ adslAtucPerfCurr1DayTimeElapsed(16) ■ adslAtucPerfCurr1DayLofs(17) ■ adslAtucPerfCurr1DayLoss(18) ■ adslAtucPerfCurr1DayLols(19) ■ adslAtucPerfCurr1DayESs(21) ■ adslAtucPerfPrev1DayMonisecs(23) ■ adslAtucPerfPrev1DayLofs(24) ■ adslAtucPerfPrev1DayLoss(25) ■ adslAtucPerfPrev1DayLols(26) ■ adslAtucPerfPrev1DayESs(28)	■ Read only ■ Read only
adslAturPerfDataEntry	■ adslAturPerfLofs(1) ■ adslAturPerfLoss(2) ■ adslAturPerfLols(3) ■ adslAturPerfESs(5) ■ adslAturPerfValidIntervals(7) ■ adslAturPerfInvalidIntervals(8) ■ adslAturPerfCurr15MinTimeElapsed(9) ■ adslAturPerfCurr15MinLofs(10) ■ adslAturPerfCurr15MinLoss(11) ■ adslAturPerfCurr15MinLols(12) ■ adslAturPerfCurr15MinESs(14) ■ adslAturPerfCurr1DayTimeElapsed(16) ■ adslAturPerfCurr1DayLofs(17) ■ adslAturPerfCurr1DayLoss(18) ■ adslAturPerfCurr1DayLols(19)	■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only

Table C-12. DMT Line Code Specific MIB Objects (3 of 5)

Table	Objects	Contents
adslAturPerfDataEntry *(continued)*	■ adslAturPerfCurr1DayESs(21) ■ adslAturPerfPrev1DayMonisecs(23) ■ adslAturPerfPrev1DayLofs(24) ■ adslAturPerfPrev1DayLoss(25) ■ adslAturPerfPrev1DayLols(26) ■ adslAturPerfPrev1DayESs(28)	■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only
adslAtucIntervalEntry	■ adslAtucIntervalNumber(1) ■ adslAtucIntervalLofs(2) ■ adslAtucIntervalLoss(3) ■ adslAtucIntervalLols(4) ■ adslAtucIntervalLprs(5) ■ adslAtucIntervalESs(7) ■ adslAtucIntervalValidData(8)	■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only
adslAturIntervalEntry	■ adslAturIntervalNumber(1) ■ adslAturIntervalLofs(2) ■ adslAturIntervalLoss(3) ■ adslAturIntervalLols(4) ■ adslAturIntervalLprs(5) ■ adslAturIntervalESs(7) ■ adslAturIntervalValidData(8)	■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only
adslAtucChanPerfDataEntry	■ adslAtucChanReceivedBlks(1) ■ adslAtucChanTransmittedBlks(2) ■ adslAtucChanCorrectedBlks(3) ■ adslAtucChanUnCorrectBlks(4) ■ adslAtucChanPerfValidIntervals(5) ■ adslAtucChanPerfInvalidIntervals(6) ■ adslAtucChanPerfCurr15MinTimeElapsed (7) ■ adslAtucChanPerfCurr15MinReceivedBlks(8) ■ adslAtucChanPerfCurr15MinTransmittedBlks(9) ■ adslAtucChanPerfCurr15MinCorrectedBlks(10) ■ adslAtucChanPerfCurr15MinUnCorrectBlks(11) ■ adslAtucChanPerfCurr1DayTimeElapsed (12) ■ adslAtucChanPerfCurr1DayReceivedBlks (13) ■ adslAtucChanPerfCurr1DayTransmittedBlks (14) ■ adslAtucChanPerfCurr1DayCorrectedBlks(15)	■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only

Table C-12. DMT Line Code Specific MIB Objects (4 of 5)

Table	Objects	Contents
adslAtucChanPerfDataEntry *(continued)*	■ adslAtucChanPerfCurr1DayUncorrectBlks(16) ■ adslAtucChanPerfPrev1DayMoniSecs(17) ■ adslAtucChanPerfPrev1DayReceivedBlks(18) ■ adslAtucChanPerfPrev1DayTransmittedBlks(19) ■ adslAtucChanPerfPrev1DayCorrectedBlks(20) ■ adslAtucChanPerfPrev1DayUncorrectBlks(21)	■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only
adslAturChanPerfDataEntry	■ adslAturChanReceivedBlks(1) ■ adslAturChanTransmittedBlks(2) ■ adslAturChanCorrectedBlks(3) ■ adslAturChanUnCorrectBlks(4) ■ adslAturChanPerfValidIntervals(5) ■ adslAturChanPerfInvalidIntervals(6) ■ adslAturChanPerfCurr15MinTimeElapsed (7) ■ adslAturChanPerfCurr15MinReceivedBlks(8) ■ adslAturChanPerfCurr15MinTransmittedBlks(9) ■ adslAturChanPerfCurr15MinCorrectedBlks(10) ■ adslAturChanPerfCurr15MinUnCorrectBlks(11) ■ adslAturChanPerfCurr1DayTimeElapsed (12) ■ adslAturChanPerfCurr1DayReceivedBlks (13) ■ adslAturChanPerfCurr1DayTransmittedBlks (14) ■ adslAturChanPerfCurr1DayCorrectedBlks(15) ■ adslAturChanPerfCurr1DayUncorrectBlks(16) ■ adslAturChanPerfPrev1DayMoniSecs(17) ■ adslAturChanPerfPrev1DayReceivedBlks(18) ■ adslAturChanPerfPrev1DayTransmittedBlks(19) ■ adslAturChanPerfPrev1DayCorrectedBlks(20) ■ adslAturChanPerfPrev1DayUncorrectBlks(21)	■ Read only ■ Read only
adslAtucChanIntervalEntry	■ adslAtucChanIntervalNumber(1) ■ adslAtucChanIntervalReceivedBlks(2) ■ adslAtucChanIntervalTransmittedBlks(3) ■ adslAtucChanIntervalCorrectedBlks(4) ■ adslAtucChanIntervalUncorrectBlks(5) ■ adslAtucChanIntervalValidData(6)	■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only

Table C-12. DMT Line Code Specific MIB Objects (5 of 5)

Table	Objects	Contents
adslAturChanIntervalEntry	■ adslAturChanIntervalNumber(1) ■ adslAturChanIntervalReceivedBlks(2) ■ adslAturChanIntervalTransmittedBlks(3) ■ adslAturChanIntervalCorrectedBlks(4) ■ adslAturChanIntervalUncorrectBlks(5) ■ adslAturChanIntervalValidData(6)	■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only
adslLineConfProfileEntry	■ adslLineConfProfileName(1) ■ adslAtucConfRateMode(2) ■ adslAtucConfTargetSnrMgn(4) ■ adslAtucConfMinUpshiftTime(9) ■ adslAtucConfMinDownshiftTime(10) ■ adslAtucChanConFastMinTxRate(11) ■ adslAtucChanConFastMaxTxRate(13) ■ adslAturConfRateMode(16) ■ adslAturConfTargetSnrMgn(18) ■ adslAturConfMinUpshiftTime(23) ■ adslAturConfMinDownshiftTime(24) ■ adslAturConfMinTxRate(25) ■ adslAturConfFastMaxTxRate(27) ■ adslLineConfProfileRowStatus(30)	■ Read/write. SNMP Admin string ■ Integer ■ Integer ■ Integer ■ Integer ■ Unsigned ■ Unsigned ■ Integer ■ Integer ■ Integer ■ Integer ■ Unsigned ■ Unsigned ■ Row status
adslLineAlarmConfProfileEntry	■ adslLineAlarmConfProfileName(1) ■ adslAtucThresh15MinLofs(2) ■ adslAtucThresh15MinLoss(3) ■ adslAtucThresh15MinLols(4) ■ adslAtucThresh15MinESs(6) ■ adslAtucThreshFastRateUp(7) ■ adslAtucThreshFastRateDown(9) ■ adslAtucInitFailureTrapEnable(11) ■ adslAturThresh15MinLofs(12) ■ adslAturThresh15MinLoss(13) ■ adslAturThresh15MinLols(14) ■ adslAturThresh15MinLprs(15) ■ adslAturThresh15MinESs(16) ■ adslAturThreshFastRateUp(17) ■ adslAturThreshFastRateDown(19) ■ adslLineAlarmConfProfileRowStatus(21)	■ SNMP admin string ■ Integer ■ Integer ■ Integer ■ Integer ■ Unsigned ■ Unsigned ■ Integer ■ Integer ■ Integer ■ Integer ■ Integer ■ Integer ■ Unsigned ■ Unsigned ■ Row status

ADSL Supplement to the ADSL Line MIB

The objects supported for the supplement to the ADSL Line MIB are listed in Table C-13, ADSL Supplement to the ADSL Line MIB Objects.

Table C-13. ADSL Supplement to the ADSL Line MIB Objects

Table	Objects	Contents
adslAtucPerfDataExtEntry	■ adslAtucPerfStatSesL(3) ■ adslAtucPerfStatUasL(4) ■ adslAtucPerfCurr15MinSesL(7) ■ adslAtucPerfCurr15MinUasL(8) ■ adslAtucPerfCurr1DaySesL(11) ■ adslAtucPerfCurr1DayUasL(12) ■ adslAtucPerfPrev1DaySesL(15) ■ adslAtucPerfPrev1DayUasL(16)	■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only
adslAtucIntervalExtEntry	■ adslAtucIntervalSesL ■ adslAtucIntervalUasL	■ Read only ■ Read only
adslAturPerfDataExtEntry	■ adslAturPerfStatSesL(1) ■ adslAturPerfStatUasL(2) ■ adslAturPerfCurr15MinSesL(3) ■ adslAturPerfCurr15MinUasL(4) ■ adslAturPerfCurr1DaySesL(5) ■ adslAturPerfCurr1DayUasL(6) ■ adslAturPerfPrev1DaySesL(7) ■ adslAturPerfPrev1DayUasL(8)	■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only ■ Read only
adslAturIntervalExtEntry	■ adslAturIntervalSesL ■ adslAturIntervalUasL	■ Read only ■ Read only
adslConfProfileExtEntry	■ adslConfProfileLineType	■ Integer
adslAlarmConfProfileExtEntry	■ adslAtucThreshold15MinSesL(2) ■ adslAtucThreshold15MinUasL	■ Unsigned ■ Unsigned

DS1 MIB (RFC 2495)

The objects supported for the DS1 MIB are listed in Table C-14, DS1 MIB Objects.

Table C-14. DS1 MIB Objects (1 of 3)

Table	Objects	Contents
dsx1ConfigEntry	■ dsx1LineIndex ■ dsx1IfIndex ■ dsx1TimeElapsed ■ dsx1ValidIntervals ■ dsx1LineType ■ dsx1LineCoding ■ dsx1SendCode ■ dsx1CircuitIdentifier ■ dsx1LoopbackConfig ■ dsx1LineStatus ■ dsx1SignalMode ■ dsx1TransmitClockSource ■ dsx1Fdl ■ dsx1InvalidIntervals ■ dsx1LineLength ■ dsx1LineStatusLastChange ■ dsx1LineStatusChangeTrapEnable ■ dsx1LoopbackStatus ■ dsx1Ds1ChannelNumber ■ dsx1Channelization	■ Interface index ■ Interface Index ■ Integer ■ Integer ■ Integer ■ Integer ■ Integer ■ Display string ■ Integer ■ Integer ■ Integer ■ Integer ■ Integer ■ Integer ■ Integer ■ Time stamp ■ Integer ■ Integer ■ Integer ■ Integer
dsx1CurrentEntry	■ dsx1CurrentIndex ■ dsx1CurrentESs ■ dsx1CurrentSESs ■ dsx1CurrentSEFs ■ dsx1CurrentUASs ■ dsx1CurrentCSSs ■ dsx1CurrentPCVs ■ dsx1CurrentLESs ■ dsx1CurrentBESs ■ dsx1CurrentDMs ■ dsx1CurrentLCVs	■ Interface index ■ Perf Current Count ■ Perf Current Count ■ Perf Current Count ■ Perf Current Count ■ Perf Current Count ■ Perf Current Count ■ Perf Current Count ■ Perf Current Count ■ Perf Current Count ■ Perf Current Count

Table C-14. DS1 MIB Objects (2 of 3)

Table	Objects	Contents
dsx1IntervalEntry	■ dsx1IntervalIndex ■ dsx1IntervalNumber ■ dsx1IntervalESs ■ dsx1IntervalSESs ■ dsx1IntervalSEFs ■ dsx1IntervalUASs ■ dsx1IntervalCSSs ■ dsx1IntervalPCVs ■ dsx1IntervalLESs ■ dsx1IntervalBESs ■ dsx1IntervalDMs ■ dsx1IntervalLCVs ■ dsx1IntervalValidData	■ Interface index ■ Integer ■ Perf Interval Count ■ Perf Interval Count ■ Perf Interval Count ■ Perf Interval Count ■ Perf Interval Count ■ Perf Interval Count ■ Perf Interval Count ■ Perf Interval Count ■ Perf Interval Count ■ Perf Interval Count ■ Truth value
dsx1TotalEntry	■ dsx1TotalIndex ■ dsx1TotalESs ■ dsx1TotalSESs ■ dsx1TotalSEFs ■ dsx1TotalUASs ■ dsx1TotalCSSs ■ dsx1TotalPCVs ■ dsx1TotalLESs ■ dsx1TotalBESs ■ dsx1TotalDMs ■ dsx1TotalLCVs	■ Interface index ■ Perf Total Count ■ Perf Total Count ■ Perf Total Count ■ Perf Total Count ■ Perf Total Count ■ Perf Total Count ■ Perf Total Count ■ Perf Total Count ■ Perf Total Count ■ Perf Total Count
dsx1ChanMappingEntry	■ dsx1ChanMappedIfIndex	■ Interface index
dsx1FarEndCurrentEntry	■ dsx1FarEndCurrentIndex ■ dsx1FarEndTimeElapsed ■ dsx1FarEndValidIntervals ■ dsx1FarEndCurrentESs ■ dsx1FarEndCurrentSESs ■ dsx1FarEndCurrentSEFs ■ dsx1FarEndCurrentUASs ■ dsx1FarEndCurrentCSSs ■ dsx1FarEndCurrentPCVs ■ dsx1FarEndCurrentLESs	■ Interface index ■ Integer ■ Integer ■ Perf Current Count ■ Perf Current Count ■ Perf Current Count ■ Perf Current Count ■ Perf Current Count ■ Perf Current Count ■ Perf Current Count

Table C-14. DS1 MIB Objects (3 of 3)

Table	Objects	Contents
dsx1FarEndCurrentEntry *(continued)*	■ dsx1FarEndCurrentBESs ■ dsx1FarEndCurrentDMs ■ dsx1FarEndCurrentLCVs	■ Perf Current Count ■ Perf Current Count ■ Perf Current Count
dsx1FarEndIntervalEntry	■ dsx1FarEndIntervalIndex ■ dsx1FarEndIntervalNumber ■ dsx1FarEndIntervalESs ■ dsx1FarEndIntervalSESs ■ dsx1FarEndIntervalSEFs ■ dsx1FarEndIntervalUASs ■ dsx1FarEndIntervalCSSs ■ dsx1FarEndIntervalPCVs ■ dsx1FarEndIntervalLESs ■ dsx1FarEndIntervalBESs ■ dsx1FarEndIntervalDMs ■ dsx1IntervalValidData	■ Interface index ■ Perf Interval Count ■ Perf Interval Count ■ Perf Interval Count ■ Perf Interval Count ■ Perf Interval Count ■ Perf Interval Count ■ Perf Interval Count ■ Perf Interval Count ■ Perf Interval Count ■ Perf Interval Count ■ Truth value
dsx1FarEndTotalEntry	■ dsx1FarEndTotalIndex ■ dsx1FarEndTotalESs ■ dsx1FarEndTotalSESs ■ dsx1FarEndTotalSEFs ■ dsx1FarEndTotalUASs ■ dsx1FarEndTotalCSSs ■ dsx1FarEndTotalPCVs ■ dsx1FarEndTotalLESs ■ dsx1FarEndTotalBESs ■ dsx1FarEndTotalDMs	■ Interface index ■ Perf Total Count ■ Perf Total Count ■ Perf Total Count ■ Perf Total Count ■ Perf Total Count ■ Perf Total Count ■ Perf Total Count ■ Perf Total Count ■ Perf Total Count

Paradyne Enterprise MIBs

The following Paradyne Enterprise MIB Objects are supported:

- **Paradyne DSLAM System MIB (pdn_dslam.mib)**
- **Paradyne Security MIB (pdn_Security.mib)**
- **Paradyne Syslog MIB (pdn_syslog.mib)**
- **Paradyne Health and Status MIB (mpe_HealthAndStatus.mib)**
- **Paradyne Control MIB (mpe_Control.mib)** and **Paradyne Control MIB (pdn_Control.mib)**
- **Paradyne Configuration MIB (mpe_Config.mib)** and **Paradyne Configuration MIB (pdn_Config.mib)**
- **Paradyne Time MIB (pdn_Time.mib)**
- **Paradyne mpe_ATMConf.mib**
- **Paradyne ReachDSL MIB (pdn_reachDSL.mib)**
- **Paradyne DS1 Config MIB (RFC 2495)** and **Paradyne DS1 Extension MIB**

Paradyne DSLAM System MIB (pdn_dslam.mib)

Support for the pdn_dslam.mib is provided to enable an NMS to access certain objects specific to a DSLAM. The objects listed in Table C-15, Paradyne DSLAM System MIB Objects, are supported.

Table C-15. Paradyne DSLAM System MIB Objects (1 of 3)

Object	Description	Setting/Contents
loginUserId	Shows the 10 most recent logins and all active users currently accessing the device. It also keeps a record of the access application, user privileges, and log-in status.	Read only.
loginTime	Describes the access application used by the end user to access the device.	Read only. Valid values are: ■ console(1) ■ telnet(2) ■ ftp(3) ■ web(4) ■ modem(5)
loginAccessHost	Contains the IP address of the NMS station when the access application is Telnet or FTP.	Read only.

Table C-15. Paradyne DSLAM System MIB Objects (2 of 3)

Object	Description	Setting/Contents
loginUserPriv	Contains the access privileges of the user.	Read only. Valid values are: ■ administrator(1) ■ operator(2)
loginStatus	Indicates whether the user is still accessing the device.	Read only. Valid values are: ■ active(1) ■ inactive(2)
loginFailureAccessApp	Describes the access application used by the end user to access the device.	Read only. Valid values are: ■ console(1) ■ telnet(2) ■ ftp(3)
loginFailureCount	Contains the number of unsuccessful logins for console, FTP or Telnet.	Read only.
trapCommunityName	The name of the SNMP community.	Data string (1–32).
trapDestAndPort	The IP address and port of the destination of the trap.	Address.
trapsEnable	Turns traps on (enable) or off (disable) for a particular destination.	Valid values are: ■ enable(1) ■ disable(2)
trapRowStatus	Used to add or delete a row from the table.	Read only.
entCommunityName	The SNMP community name.	Data string.
entCommunityType	The type of community.	Valid values are: ■ readOnly(1): Community can only do gets. Default value. ■ readWrite(2): Community can do gets and sets.
entCommunityRowStatus	Used to add or delete a row from the table.	Read only.
sysDevUserAccountUserId	The login ID of the user account.	Display string.
sysDevUserAccountPrivilege	The access privililege of the user account.	Valid values are: ■ operator(1) ■ administrator(2)
sysDevUserAccountUserPassword	The password of the user account.	Display string.
sysDevUserAccountUserPartition	The access partition of the user account.	Default is ALL.
sysDevUserAccountRowStatus	Used to add or delete a row from the table.	Read only.

Table C-15. Paradyne DSLAM System MIB Objects (3 of 3)

Object	Description	Setting/Contents
sysDevConfigUserAccount Index	An index of the Device Configuration User Accounts table.	Integer.
sysDevConfigUserAccount UserId	The login ID of the user account.	Display string.
sysDevConfigUserAccount PrivilegedPassword	The password of the user account.	■ If the user is is configured with this password in addition to User Password, then the user is an Administrator. If the user is an Operator and does not supply this password upon user configuration, this value is NULL.
sysDevConfigUserAccountU serPassword	The password of the user account.	Display string.
sysDevConfigUserAccountR owStatus	Used to add or delete a row from the table.	Read only.

Paradyne Security MIB (pdn_Security.mib)

The Paradyne Security MIB (pdn_Security.mib) enables an SNMP manager to control the security aspects of the unit. The objects listed in Table C-16, Paradyne Security MIB Objects, are supported.

Table C-16. Paradyne Security MIB Objects (1 of 2)

Object	Description	Setting/Contents
devSecurityMgrValidation	Enables or disables SNMP source IP validation.	Integer. The default is disable (1).
devSecurityMgrMaxNumber	The maximum number of managers allowed in the devSecurityMgrTable.	Read only. Integer.
devSecurityMgrCurrentNumber	The current number of managers allowed in the devSecurityMgrTable.	Read only. Integer.
newSecurityMgrIpAddress	Specifies the IP address that identifies the SNMP manager(s) authorized to send SNMP messages.	IP address. Assumed to be 255.255.255.255 when not available.
newSecurityMgrAccess	Specifies the access allowed for an authorized NMS when manager validation is performed.	Valid values are: ■ read(1) ■ readwrite(2) ■ noAccess(3) ■ telnetNoAccess(4) ■ telnetRead(5) ■ telnetReadWrite(6)
newSecurityMgrSubnetMask	Specifies the subnet mask.	IP address.

Table C-16. Paradyne Security MIB Objects (2 of 2)

Object	Description	Setting/Contents
devSecurityTelnetSourceValidation	Enables or disables Telnet source address screening.	Valid values are: ■ disable(1) ■ enable(2)
devSecurityFtpSourceValidation	Enables or disables FTP source address screening.	Valid values are: ■ disable(1) ■ enable(2)
securityMgrIpAddress	Specifies the IP address that identifies the SNMP manager(s) authorized to send SNMP messages.	IP address.
securityMgrSubnetMask	Specifies the subnet mask.	IP address.
securityMgrSnmpAccess	Specifies the SNMP access to the device.	Integer.
securityMgrTelnetAccess	Specifies Telnet access to the device.	Integer.
securityMgrFtpAccess	Specifies FTP access to the device.	Integer.
securityMgrTrapAccess	Specifies the trap access to the device.	Integer.
securityMgrRowStatus	Specifies the status fo this table entry	Row status.
devSecuritySNMPMgrAccess	Enables or disables SNMP access to the system.	Integer.

Paradyne Syslog MIB (pdn_syslog.mib)

The Paradyne Syslog MIB (pdn_syslog.mib) defines a set of objects for managing syslog messages. The objects listed in Table C-17, Paradyne Syslog MIB Objects, are supported.

Table C-17. Paradyne Syslog MIB Objects (1 of 2)

Object	Description	Setting/Contents
pdnSyslogStatus	Enables or disables syslog event generation.	Valid values are: ■ Disable(1) ■ Enable(2)
pdnsyslogIPAddr	Specifies the IP address of a syslog server. If the IP address is known, then this can be used for the remote syslog daemon.	IP address.
pdnSyslogPort	Corresponds to a UDP port number to which system events are sent.	The default is 514.

Table C-17. Paradyne Syslog MIB Objects (2 of 2)

Object	Description	Setting/Contents
pdnSyslogSeverityThreshold	Specifies the minimum severity level that syslog messages can be sent.	Valid values are: ■ emergency(0): System is unusable ■ alert(1): Action must be taken immediately ■ critical(2): Critical conditions ■ error(3): Error conditions ■ warning(4): Warning conditions ■ notice(5): Normal, but significant condition ■ info(6): Informational messages ■ debug(7): Debug-level messages
pdnSyslogRemoteDaemon	Enables or disables syslog messages going to a remote daemon.	Valid values are: ■ Disable(1) ■ Enable(2)
pdnSyslogNumber	A sequentially increasing index of syslog messages starting at 1. The index is reset to 1upon device reset or when the table is cleared (using pdnSyslogClearTable).	Integer.
pdnSyslogMessage	The text of the syslog message.	Octet string.
pdnSyslogNumOfMsgInTable	Specifies the number of syslog messages currently in the syslog table.	Integer.
pdnSyslogMaxTableSize	The maximum number of syslog messages the syslog table can hold.	Integer.
pdnSyslogClearTable	Clears all the entries in the syslog message table.	Valid values are: ■ noOp(1) ■ clear(2)
pdnSyslogMsgToConsole	Allows messages to be sent to the device's console port. For debugging only.	Valid values are: ■ Disable(1) ■ Enable(2)
pdnSyslogRateLimiting	Enables or disables rate limit timing.	Valid values are: ■ Disable(1) ■ Enable(2)

Paradyne Health and Status MIB (mpe_HealthAndStatus.mib)

The Paradyne Health and Status MIB (mpe_HealthAndStatus.mib) stores the results of the Power-On Self Test. This MIB begins with mpe, indicating that it is indexed on the entPhysicalIndex and depends upon the Entitiy MIB to be implemented. The objects supported are listed in Table C-18, Paradyne Health and Status MIB Objects.

Table C-18. Paradyne Health and Status MIB Objects

Table	Objects	Contents
mpeDevHealthAndStatusEntry	■ mpeDevSelfTestResults(1) ■ entPhysicalIndex	■ Octet String ■ Physical index

Paradyne Control MIB (mpe_Control.mib)

The Paradyne Control MIB (mpe_Control.mib) stores the results of the Power-On Self Test. This MIB begins with mpe, indicating that it is indexed on the entPhysicalIndex and depends upon the Entity MIB to be implemented. The objects supported are listed in Table C-19, Paradyne Control MIB Objects.

Table C-19. Paradyne Control MIB Objects (1 of 2)

Table	Object	Type
mpeDevControlTable	■ mpeDevControlReset(1) ■ entPhysicalIndex	■ Reset states ■ Physical index
mpeDevFileXferConfigTable	■ mpeDevFileXferFileName(1) ■ mpeDevFileXferCopyProtocol(2) ■ mpeDevFileXferFileType(3) ■ mpeDevFileXferServerIpAddress(4) ■ mpeDevFileXferUserName(5) ■ mpeDevFileXferUserPassword(6) ■ mpeDevFileXferOperation(7) ■ mpeDevFileXferPktsSent(8) ■ mpeDevFileXferPktsRecv(9) ■ mpeDevFileXferOctetsSent(10) ■ mpeDevFileXferOctetsRecv(11) ■ mpeDevFileXferOwnerString(12) ■ mpeDevFileXferStatus(13) ■ mpeDevFileXferErrorStatus(14) ■ mpeDevFileXferSendEvent(15)	■ Display string ■ Integer ■ Integer ■ IP address ■ Display string ■ Display string ■ Integer ■ Counter ■ Counter ■ Counter ■ Counter ■ Octet string ■ Integer ■ Integer ■ Integer

Table C-19. Paradyne Control MIB Objects (2 of 2)

Table	Object	Type
mpeDevFileXferConfigTable *(continued)*	■ mpeDevFileXferRowStatus(16) ■ mpeDevFileXferXferTime(17) ■ mpeDevFileXferFileFormat(18)	■ Row status ■ Time ticks ■ Integer
mpeDevControlSelfTest Table	■ entPhysicalIndex ■ mpeDevControlExtendedSelfTest	■ Integer ■ Integer
mpeDevControlTestTable	■ entPhysicalIndex ■ mpeDevControlTestType ■ mpeDevControlTestStatus ■ mpeDevControlTestCmd	■ Integer ■ Integer ■ Integer ■ Integer
mpeDevFirmwareControlTable	■ entPhysicalIndex ■ mpeDevFirmwareControlIndex(1) ■ mpeDevFirmwareControlRelease(2) ■ mpeDevFirmwareControlOperStatus(4) ■ mpeDevFirmwareControlAdminStatus(5)	 ■ Integer ■ Display String ■ Integer ■ Integer

Paradyne Control MIB (pdn_Control.mib)

The Paradyne Control MIB (pdn_Control.mib) stores the results of the Power-On Self Test. This MIB begins with pdn, indicating that it can be used if the Entity MIB is not implemented. The objects supported are listed in Table C-20, Paradyne Control MIB Objects.

Table C-20. Paradyne Control MIB Objects

Table	Objects	Contents
devControlTestTable	■ devHWControlReset ■ devControlTest ■ devControlTestStatus ■ devControlTestCmd ■ devIsAutoFwEnabled ■ devAutoFwStatus	■ Integer ■ Integer ■ Integer ■ Integer ■ Switch state ■ Display string

Paradyne Configuration MIB (mpe_Config.mib)

The Paradyne Configuration MIB (mpe_Config.mib) allows the choice of the network timing reference source for the GranDSLAM 4200 (mpeDevConfigClockSrcEntry table).

Table C-21. Paradyne Configuration MIB Objects

Object	Description	Setting/Contents
mpeDevCfgClkWhichSrc	Defines the master clock source.	Integer. The only valid value is primary(1).
mpeDevCfgClkSource	Selects the source for the master clock for the device.	Read/write. Integer. Valid values are: ■ internal(1) ■ external(2)

Paradyne Configuration MIB (pdn_Config.mib)

The Paradyne Configuration MIB (pdn_Config.mib) enables configuration of test timeouts (devConfigTestTimer table).

Table C-22. Paradyne Configuration MIB Objects

Object	Description	Setting/Contents
devConfigTestTimeout	Defines the master clock source.	Read/write. Integer. Valid values are: ■ disable(1): Tests will not be terminated based on a timer ■ enable(2): Tests will be terminated after the duration specified by devConfigTest Duration.
devConfigTestDuration	Specifies how long a test is allowed to run before it is automatically terminated.	Read/write. Integer.

Paradyne Time MIB (pdn_Time.mib)

The Paradyne Time MIB (pdn_Time.mib) controls the date and time on the unit.

Table C-23. Paradyne Time MIB Objects

Object	Description	Setting/Contents
devDateAndTime	Displays the unit's date and time and allows the NMS to change them to the appropriate time zone.	Read/write.
devNTPServerIP	Allows an NMS to configure the NTP server and IP address.	Read/write.
devNTPMode	Allows an NMS to configure the NTP mode.	Read/write. Valid Values are: ■ Unicast: NTP polls a specific server. The NTP server must have been configured using the NTPServerIP object. ■ Broadcast: NTP broadcasts a request and any NTP server can respond.

Paradyne mpe_ATMConf.mib

This MIB is used for configuration of ATM-specific objects that are not available through the standard MIB RFC 2515.

Table C-24. Paradyne mpe_ATMConf.mib

Object	Description	Setting/Contents
mpeAtmLoopbackLocationCode	Identifies this module for the purpose of OAM f5 loopback.	Read/write.
entPhysicalIndex	The physical index of the card in the DSLAM.	Not accessible.

Paradyne ReachDSL MIB (pdn_reachDSL.mib)

This Paradyne enterprise MIB provides objects for configuration of objects specific to ReachDSL v3 devices such as the Hotwire 6390 ReachDSL Modem. The following objects are supported.

Table C-25. Paradyne ReachDSL MIB Objects

Table	Objects	Contents
N/A	■ reachDSLSpectrumMgmtSelection ■ reachDSLSpectrumMgmtZone	■ Integer ■ Integer
ReachDSLSpectrumMgmtConfEntry	■ reachDSLSpectrumMgmtConfEWL ■ reachDSLSpectrumMgmtConfLoopLength ■ reachDSLSpectrumMgmtConfAtucMaxTx Power ■ reachDSLSpectrumMgmtConfAturMaxTx Power	■ Unsigned ■ Integer ■ Integer ■ Integer
ReachDSLSpectrumMgmtLineInfoEntry	■ reachDSLSpectrumMgmtAtucMaxTxRate ■ reachDSLSpectrumMgmtAtucMinTxRate ■ reachDSLSpectrumMgmtAtucMaxTxPower ■ reachDSLSpectrumMgmtAturMaxTxRate ■ reachDSLSpectrumMgmtAturMinTxRate ■ reachDSLSpectrumMgmtAturMaxTxPower	■ Unsigned ■ Unsigned ■ Integer ■ Unsigned ■ Unsigned ■ Integer
ReachDSLLineEntry	reachDSLPotsDetectionVoltage reachDSLCircuitIdentifier	■ Integer ■ Display string

Paradyne DS1 Config MIB (RFC 2495)

The objects supported for the DS1 MIB are listed in Table C-26, DS1 Config MIB Objects.

Table C-26. DS1 Config MIB Objects

Table	Objects	Contents
devDS1TestEntry	■ devDS1TestIfIndex ■ devDS1TestType ■ devDS1TestControl ■ devDS1TestArgument	■ Integer ■ Integer ■ Integer ■ Display string
devDS1MonResultEntry	■ devDS1MonResultIfIndex ■ devDS1MonResultTestType ■ devDS1MonResultCode ■ devDS1MonResultErrorCount	■ Integer ■ Integer ■ Integer ■ Gauge
devDS1SendControlEntry	■ devDS1SendControlIfIndex ■ devDS1SendControlInjectErr ■ devDS1Send ControlErrorCount	■ Integer ■ Integer ■ Gauge

Paradyne DS1 Extension MIB

The objects supported for the Paradyne extension to the DS1 MIB are listed in Table C-27, Paradyne Extension to DS1 Config MIB Objects.

Table C-27. Paradyne Extension to DS1 Config MIB Objects

Table	Objects	Contents
devDs1ExtConfEntry	■ pdnDs1ExtConfLineLengthType ■ pdnDs1ExtConfShortHaul ■ pdnDs1ExtConfLongHaul ■ pdnDs1ExtConfConnector ■ ifIndex	■ Integer ■ Integer ■ Integer ■ Integer ■ Integer

Hotwire 6390 ReachDSL Modem Download

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Hotwire 6390 ReachDSL Modem Overview

The Hotwire 6390 ReachDSL Modem is a component in the ReachDSL System and interoperates with the GranDSLAM 4200 ATM Stackable DSLAM. This system provides high-speed Internet or corporate LAN access over traditional twisted-pair copper telephone wiring.

The ReachDSL technology:

- Operates over existing copper wire with existing telephone jacks.
- Uses an inline phone filter on the modem's PHONE jack.
- Includes a second line pass-through from the ReachDSL modem's LINE jack to PHONE jack to accommodate an attached 2-line telephone.
- Provides adaptive data rates to dynamically adapt and allocate bandwidth to optimize applications.

Refer to the *Hotwire ReachDSL Modem, Model 6390 with Inline Phone Filter, Installation Instructions*, for instructions on how to install the Hotwire 6390 ReachDSL Modem.

Downloading Hotwire 6390 ReachDSL Modem Software

The Hotwire 6390 ReachDSL Modem is capable of receiving a download of its software while continuing to pass data. Before attempting to download, you must first build a management Permanent Virtual Circuit (PVC) through the GranDSLAM 4200 to VPI 0, VCI 33 on the port connected to the Hotwire 6390 ReachDSL modem to be downloaded (see Figure D-1, Network View of Hotwire 6390 ReachDSL Modem Software Download).

The Hotwire 6390 ReachDSL Modem acts as a Trivial File Transfer Protocol (TFTP) server while receiving a download through its DSL interface. To perform a software download, you must use a PC containing a TFTP client running on Windows 2000, Windows NT, or a UNIX platform.

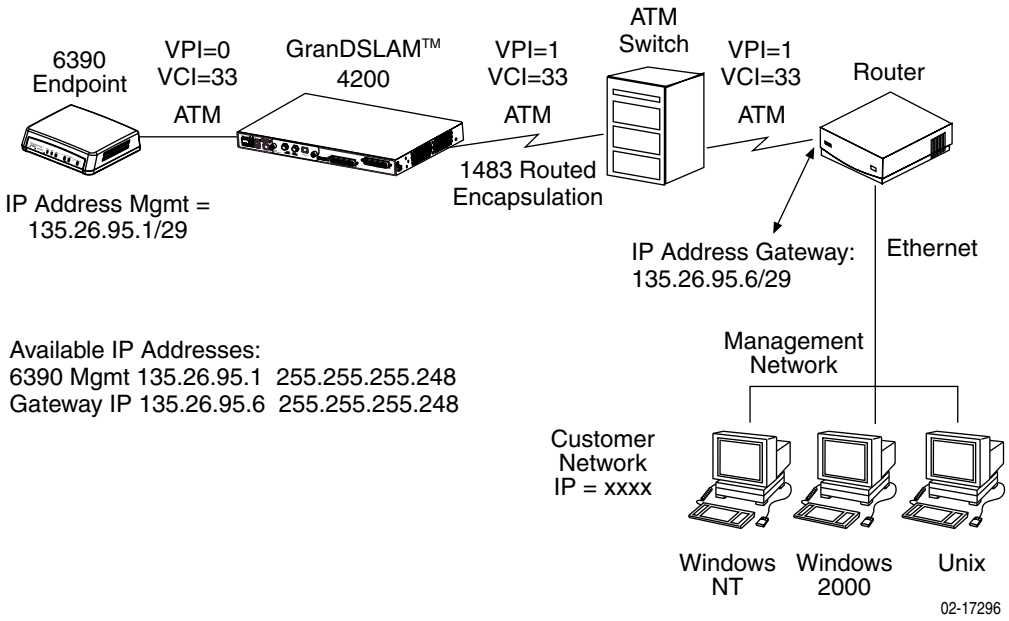

Figure D-1. Network View of Hotwire 6390 ReachDSL Modem Software Download

▶ Procedure

To create a PVC from the GrandDSLAM 4200 port to the Hotwire 6390 ReachDSL modem:

1. Log into the GranDSLAM 4200 unit using the **ACT-USER** command.

   For example, type:

   ACT-USER:TAMPA:SUPERUSER:100::******

2. Create a VCL to the upstream network (on the NT) with VPI=1 and VCI=33 using the **ENT-VCL** command.

   For example, type:

   ENT-VCL:TAMPA:NTVCL-1-33:100::1,1;

3. Create a VCL to the Hotwire 6390 ReachDSL Modem attached to Port 1 (on the LT) with VPI=0 and VCI=33 using the **ENT-VCL** command.

   For example, type:

   ENT-VCL:TAMPA:LTVCL-1-1-1-1-0-33:100::1,1;

4. Create a cross connection between the upstream ATM network (NT) and Port 1 (LT) using the **ENT-CRS-VC** command.

   For example, type:

   ENT-CRS-VC:TAMPA:NTVCL-1-33,LTVCL-1-1-1-1-0-33:100::::IS;

5. Define a management PVC path across the ATM network to reach the GranDSLAM 4200 1/33 uplink management PVC using 1483 routed encapsulation.

6. Assign a Gateway IP address of 135.26.95.6/29 (where 29 is 29 bits in the subnet mask), if needed, to the router port.

7. Ping the Hotwire 6390 ReachDSL Modem Management IP address (135.26.95.1) from the network side.

▶ Procedure

To download new software to the Hotwire 6390 ReachDSL Modem flash memory:

1. Create the following files on a PC using Notepad or a text editor program and place them in the same folder as the batch file you will create in Step 2:
   - tftplock.key with the word *password* in it
   - tftpupdt.beg blank (contents are ignored so can be null)
   - tftpupdt.rbt blank (contents are ignored so can be null)
   - tftpupdt.end blank (contents are ignored so can be null)
2. Using an editor, create a batch file (for example, epdown.bat) and add the following lines:
   - **`tftp -i 135.26.95.1 put tftplock.key`**
     (the ASCII string password unlocks the 6390 modem's TFTP server)
   - **`tftp -i 135.26.95.1 put tftpupdt.beg`**
     (notifies the 6390 modem's TFTP server that a firmware update is beginning)
   - **`tftp -i 135.26.95.1 put`** *filename* **`image`**
     (for example, **`u010019.fpi`** for firmware file 1.0.19 downloads the executable file)
   - **`tftp -i 135.26.95.1 put tftpupdt.rbt`**
     (notifies the 6390 modem's TFTP server that a reset should be performed automatically on completion)
   - **`tftp -i 135.26.95.1 put tftpupdt.end`**
     (notifies the 6390 modem's TFTP server that the update sequence has completed)
3. Use the PC (where the batch file resides) and go to the DOS prompt **`C:\>.`**

   Type **`epdown.bat`** and press Enter to execute the batch file you just created to download software to the Hotwire 6390 ReachDSL Modem.

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